



10053520 120902

#12

FIG.1A

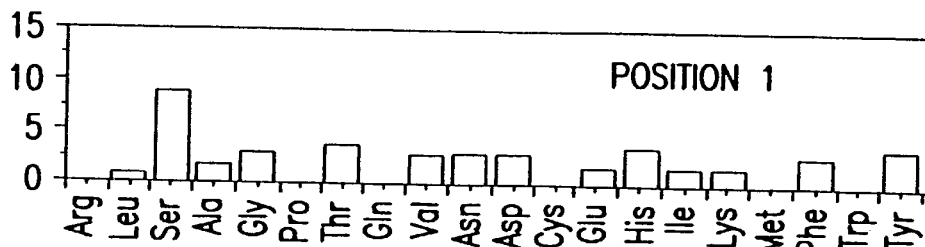


FIG.1B

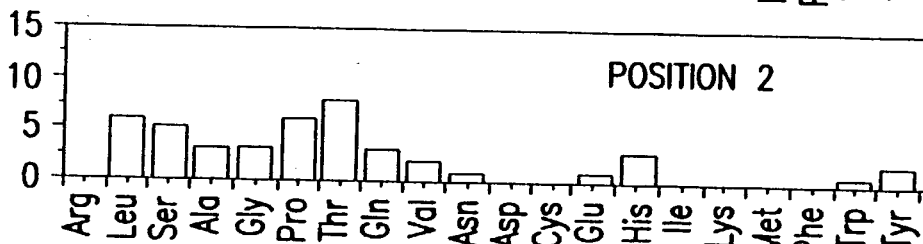


FIG.1C

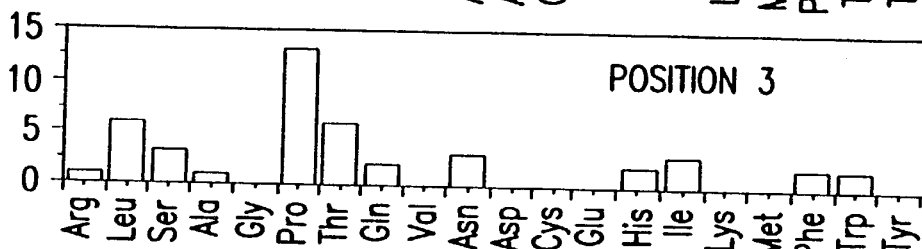


FIG.1D

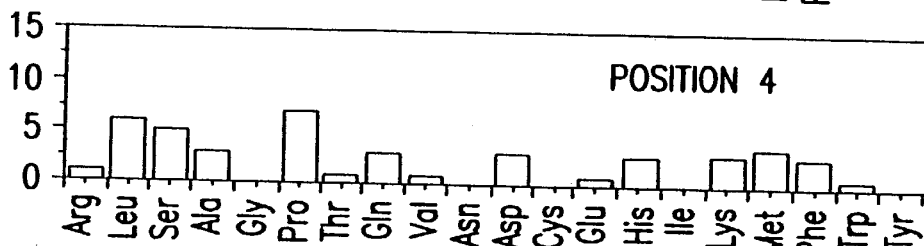


FIG.1E

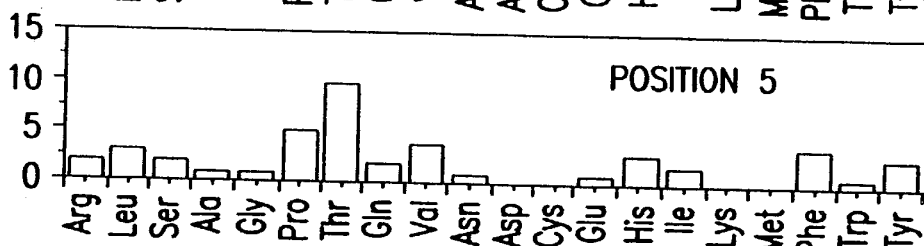


FIG.1F

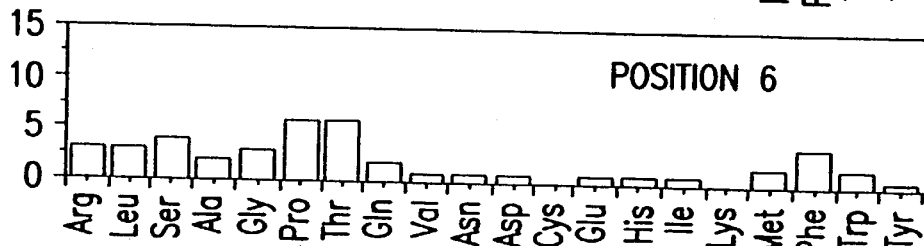
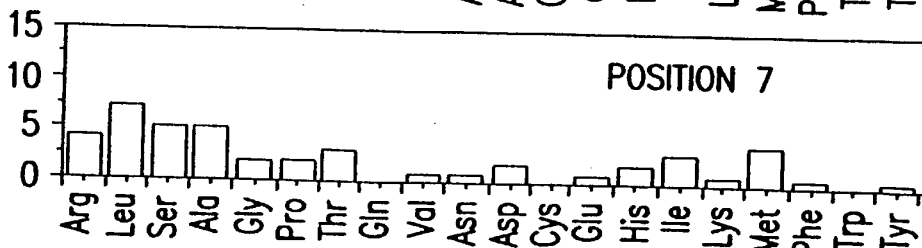


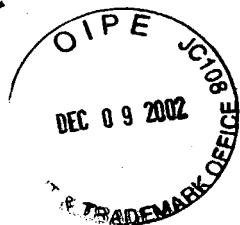
FIG.1G





His Thr Thr Val Tyr Gly Ala Gly  
 CAT ACG ACT GTT TAT GGG GCT GGT  
  
 Thr Glu Thr Pro Tyr Pro Thr Gly  
 ACT GAG ACG CCT TAT CCT ACT GGT  
  
 Leu Thr Thr Pro Phe Ser Ser Gly  
 CTT ACT ACT CCG TTT TCG TCG GGT  
  
 Gly Val Pro Leu Thr Met Asp Gly  
 GGT GTG CCT CTT ACG ATG GAT GGT  
  
 Lys Leu Pro Thr Val Leu Arg Gly  
 AAG CTT CCG ACT GTT CTG CGG GGT  
  
 Cys Arg Phe His Gly Asn Arg Gly  
 TGT CGC TTT CAT GGG AAT CGT GGT  
  
 Tyr Thr Arg Asp Phe Glu Ala Gly  
 TAT ACT CGG GAT TTT GAG GCT GGT  
  
 Ser Ser Ala Ala Gly Pro Arg Gly  
 TCG TCG GCG GCT GGT CCG CGG GGT  
  
 Ser Leu Ile Gln Tyr Ser Arg Gly  
 TCT CTG ATT CAG TAT TCG AGG GGT  
  
 Asp Ala Leu Met Trp Pro UKN Gly  
 GAT GCT CTT ATG TGG CCT NTG GGT  
  
 Ser Ser UKN Ser Leu Tyr Ile Gly  
 TCG TCT CNT TCG TTG TAT ATT GGT  
  
 Phe Asn Thr Ser Thr Arg Thr Gly  
 TTT AAT ACT TCG ACG CGT ACG GGT  
  
 Thr Val Gln His Val Ala Phe Gly  
 ACT GTG CAG CAT GTT GCT TTT GGT  
  
 Asp Tyr Ser Phe Pro Pro Leu Gly  
 GAT TAT TCT TTT CCG CCT CTT GGT  
  
 Val Gly Ser Met Glu Ser Leu Gly  
 GTG GGG TCT ATG GAG TCG TTG GGT  
  
 Phe UKN Pro Met Ile UKN Ser Gly  
 TTT CAN CCG ATG ATT NGN TCG GGT  
  
 Ala Pro Pro Arg Val Thr Met Gly  
 GCG CCT CCG CGG GTT ACT ATG GGT

FIG.1H



Ile Ala Thr Lys Thr Pro Lys Gly  
 ATT GCT ACG AAG ACG CCT AAG GGT  
  
 Lys Pro Pro Leu Phe Gln Ile Gly  
 AAG CCT CCG TTG TTT CAG ATT GGT  
  
 Tyr His Thr Ala His Asn Met Gly  
 TAT CAT ACT GCT CAT AAT ATG GGT  
  
 Ser Tyr Ile Gln Ala Thr His Gly  
 TCT TAT ATT CAG GCT ACG CAT GGT  
  
 Ser Ser Phe Ala Thr Phe Leu Gly  
 TCG TCT TTT GCT ACT TTT CTT GGT  
  
 Thr Thr Pro Pro Asn Phe Ala Gly  
 ACG ACT CCG CCG AAT TTT GCG GGT  
  
 Ile Ser Leu Asp Pro Arg Met Gly  
 ATT TCT CTT GAT CCG CGT ATG GGT  
  
 Ser Leu Pro Leu Phe Gly Ala Gly  
 TCG CTG CCG CTG TTT GGT GCG GGT  
  
 Asn Leu Leu Lys Thr Thr Leu Gly  
 AAT CTT CTT AAG ACT ACG CTT GGT  
  
 Asp Gln Asn Leu Pro Arg Arg Gly  
 GAT CAG AAT CTG CCG CGG CGG GGT  
  
 Ser His Phe Glu Gln Leu Leu Gly  
 AGT CAT TTT GAG CAG CTG CTT GGT  
  
 Thr Pro Gln Leu His His Gly Gly  
 ACG CCG CAG CTT CAT CAT GGT GGT  
  
 Ala Pro Leu Asp Arg Ile Thr Gly  
 GCG CCT CTG GAT AGG ATT ACG GGT  
  
 Phe Ala Pro Leu Ile Ala His Gly  
 TTT GCG CCT CTT ATT GCG CAT GGT  
  
 Ser Trp Ile TER Thr Phe Met Gly  
 TCG TGG ATT TAG ACG TTT ATG GGT  
  
 Asn Thr Trp Pro His Met Tyr Gly  
 AAT ACT TGG CCT CAT ATG TAT GGT  
  
 Glu Pro Leu Pro Thr Thr Leu Gly  
 GAG CCT CTT CCG ACT ACG TTG GGT  
  
 His Gly Pro His Leu Phe Asn Gly  
 CAT GGG CCT CAT CTG TTT AAT GGT

FIG. 11



Tyr Leu Asn Ser Thr Leu Ala Gly  
TAT CTG AAT TCT ACG CTT GCT GGT

His Leu His Ser Pro Ser Gly Gly  
CAT CTT CAT AGT CCG TCG GGG GGT

FIG.1J

FIG.2A

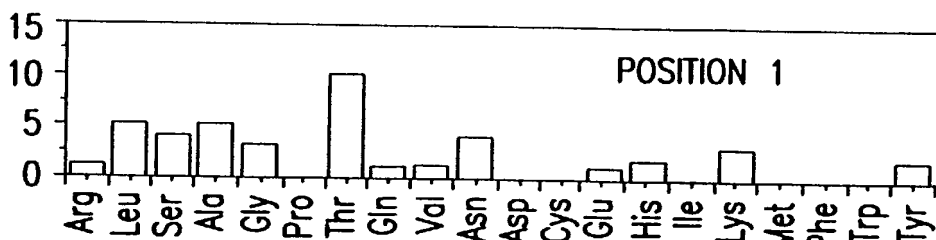


FIG.2B

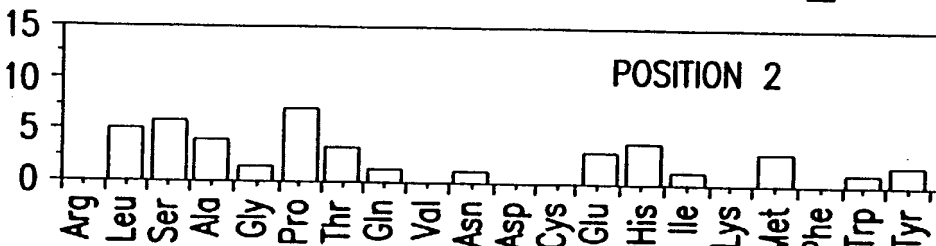


FIG.2C



FIG.2D

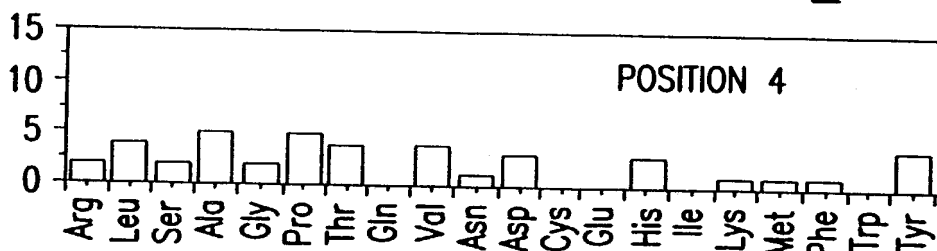


FIG.2E

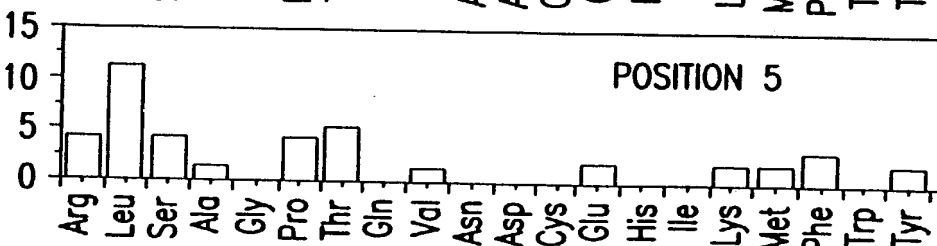


FIG.2F

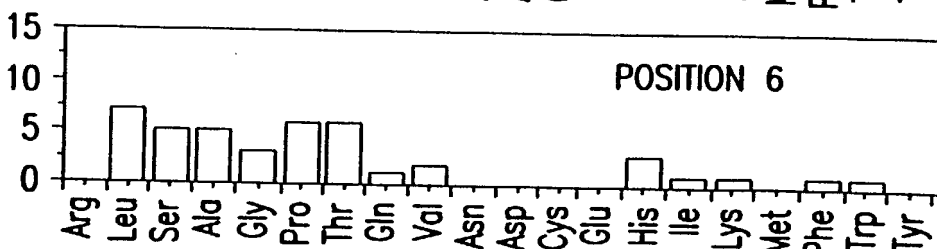
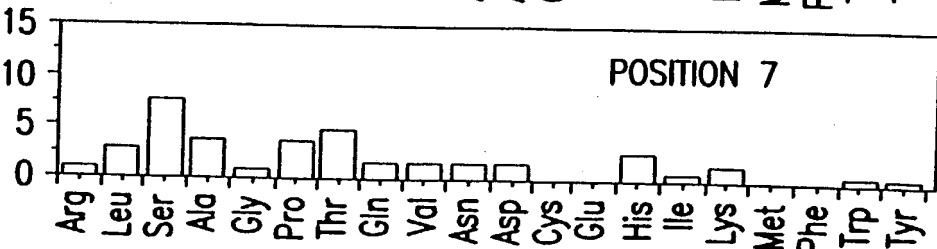


FIG.2G





Thr Leu Pro His Arg Leu Asn Gly  
 ACT CTG CCT CAT CGT CTG AAT GGT  
  
 Ser Ser Pro Arg Glu Val His Gly  
 TCG AGT CCG AGG GAG GTT CAT GGT  
  
 Asn Gln Val Asp Thr Ala Arg Gly  
 AAT CAG GTT GAT ACG GCT CGG GGT  
  
 Tyr Pro Thr Pro Leu Leu Thr Gly  
 TAT CCT ACG CCG CTG CTG ACT GGT  
  
 His Pro Ala Ala Phe Pro Trp Gly  
 CAT CCT GCT GCT TTT CCT TGG GGT  
  
 Leu leu Pro His Ser Ser Ala Gly  
 CTT CTT CCG CAT TCT AGT GCT GGT  
  
 Leu Glu Thr Tyr Thr Ala Ser Gly  
 CTT GAG ACT TAT ACG GCT TCT GGT  
  
 Lys Tyr Val Pro Leu Pro Pro Gly  
 AAG TAT GTG CCT CTG CCG CCG GGT  
  
 Ala Pro Leu Ala Leu His Ala Gly  
 GCG CCG TTG GCT CTG CAT GCG GGT  
  
 Tyr Glu Ser Leu Leu Thr Lys Gly  
 TAT GAG TCG CTG CTG ACT AAG GGT  
  
 Ser His Ala Ala Ser Gly Thr Gly  
 TCT CAT GCG GCT TCT GGT ACT GGT  
  
 Gly Leu Ala Thr Val Lys Ser Gly  
 GGT TTG GCG ACT GTT AAG TCT GGT  
  
 Gly Ala Thr Ser Phe Gly Leu Gly  
 GGT GCT ACG TCT TTT GGG CTT GGT  
  
 Lys Pro Pro Gly Pro Val Ser Gly  
 AAG CCG CCT GGG CCG GTG TCG GGT  
  
 Thr Leu Tyr Val Ser Gly Asn Gly  
 ACT CTT TAT GTT TCT GGG AAT GGT  
  
 His Ala Pro Phe Lys Ser Gln Gly  
 CAT GCT CCG TTT AAG TCT CAG GGT  
  
 Val Ala Phe Thr Arg Leu Pro Gly  
 GTG GCG TTT ACG CGG CTT CCG GGT

FIG.2H



Leu Pro Thr Arg Thr Pro Ala Gly  
CTG CCG ACT CGT ACG CCG GCT GGT

Ala Ser Phe Asp Leu Leu Ile Gly  
GCG AGT TTT GAT CTT TTG ATT GGT

Arg Met Asn Thr Glu Pro Pro Gly  
CGG ATG AAT ACT GAG CCT CCG GGT

Lys Met Thr pro Leu Thr Thr Gly  
AAG ATG ACT CCT CTG ACG ACT GGT

Ala Asn Ala Thr Pro Leu Leu Gly  
GCG AAT GCG ACG CCT CTG CTG GGT

Thr Ile Trp Pro Pro Pro Val Gly  
ACT ATT TGG CCT CCG CCT GTT GGT

Gln Thr Lys Val Met Thr Thr Gly  
CAG ACT AAG GTG ATG ACG ACG GGT

Asn His Ala Val Phe Ala Ser Gly  
AAT CAT GCT GTT TTT GCT AGT GGT

Leu His Ala Ala UKN Thr Ser Gly  
CTG CAT GCG GCT ANT ACG TCG GGT

Thr Trp Gln Pro Tyr Phe His Gly  
ACG TGG CAG CCG TAT TTT CAT GGT

Ala Pro Leu Ala Leu His Ala Gly  
GCG CCG TTG GCT CTG CAT GCG GGT

Thr Ala His Asp Leu Thr Val Gly  
ACG GCG CAT GAT CTG ACT GTT GGT

Asn Met Thr Asn Met Leu Thr Gly  
AAT ATG ACT AAT ATG CTT ACT GGT

Gly Ser Gly Leu Ser Gln Asp Gly  
GGT TCT GGG CTG TCT CAG GAT GGT

Thr Pro Ile Lys Thr Ile Tyr Gly  
ACG CCG ATT AAG ACG ATT TAT GGT

Ser His Leu Tyr Arg Ser Ser Gly  
TCG CAT CTG TAT CGT TCT AGT GGT

FIG.2I

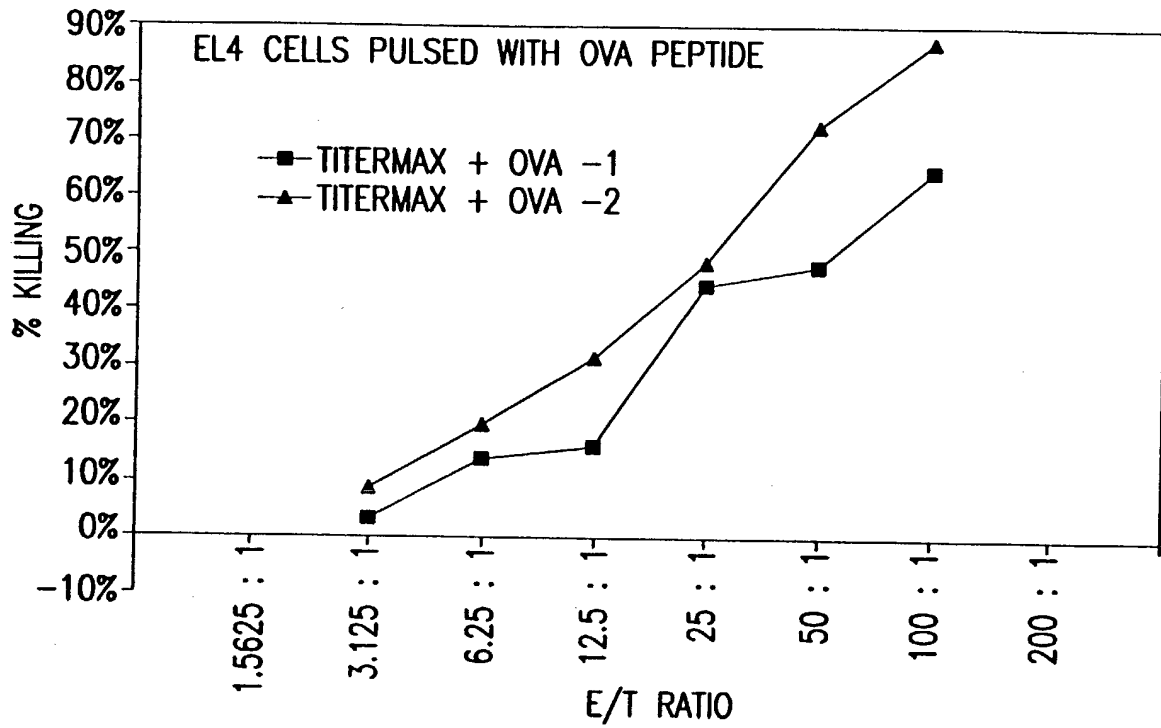


FIG. 3A

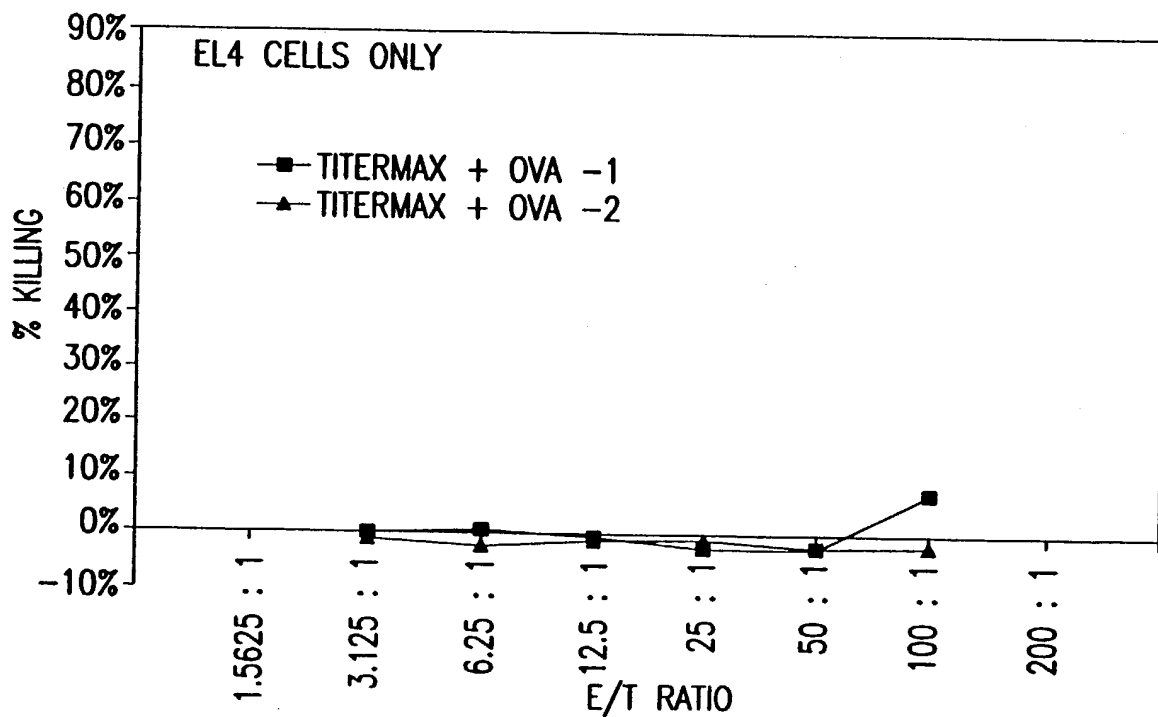


FIG. 3B



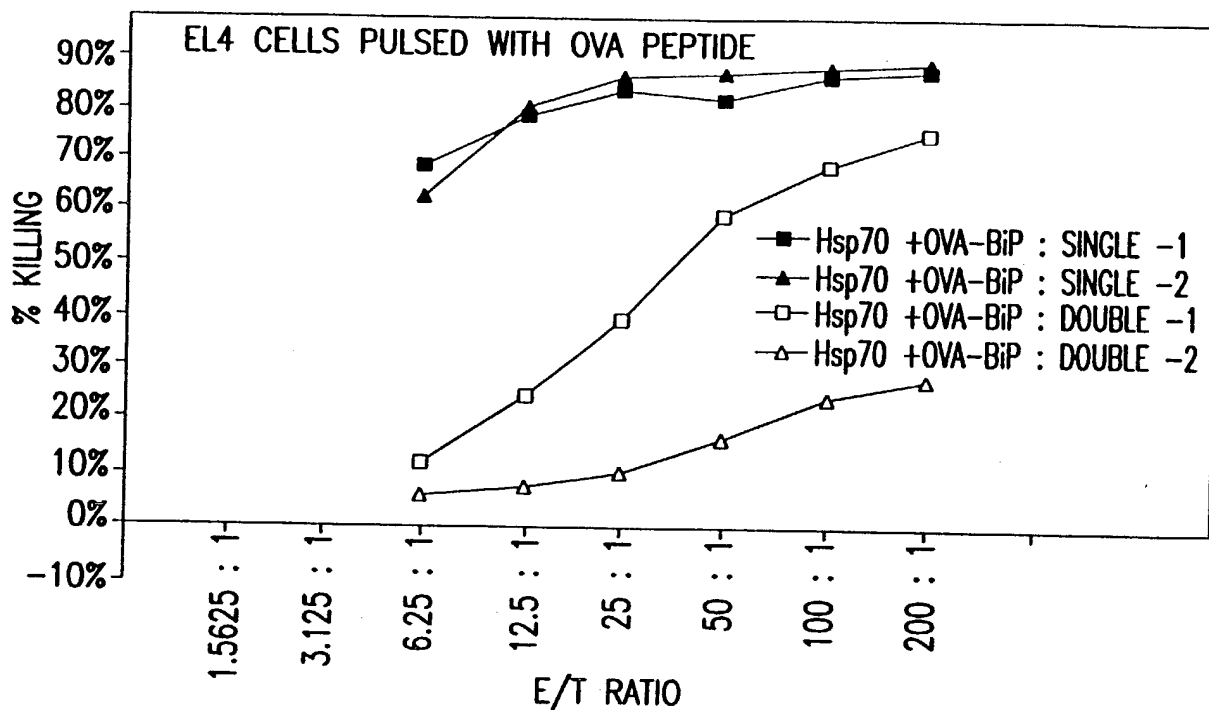


FIG.4A

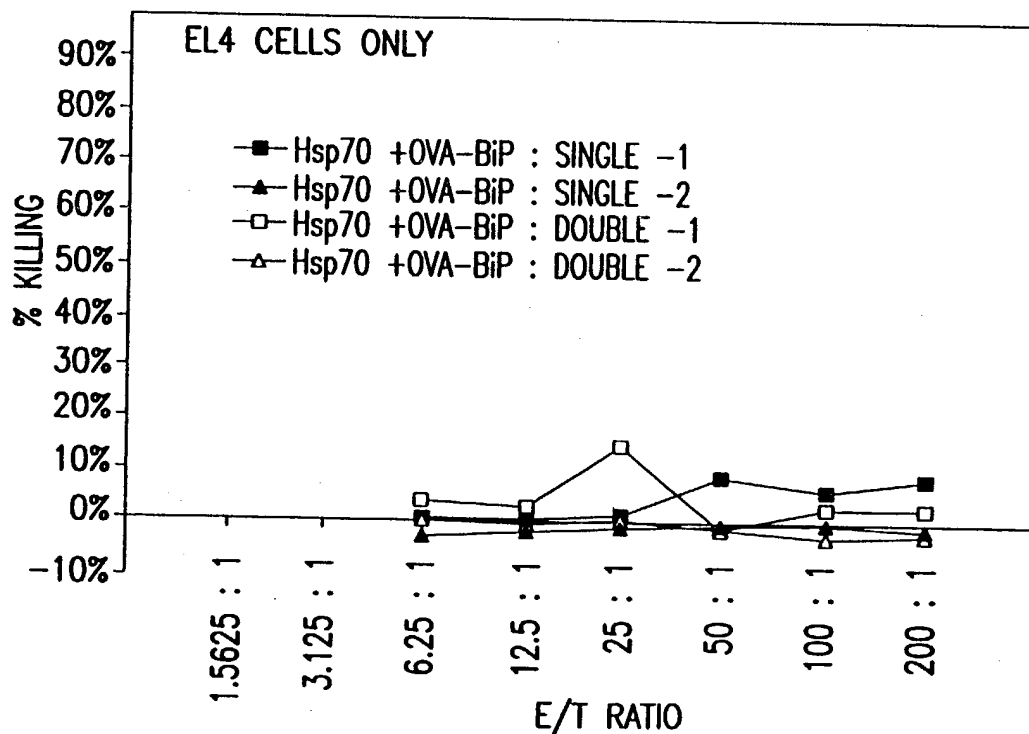


FIG.4B

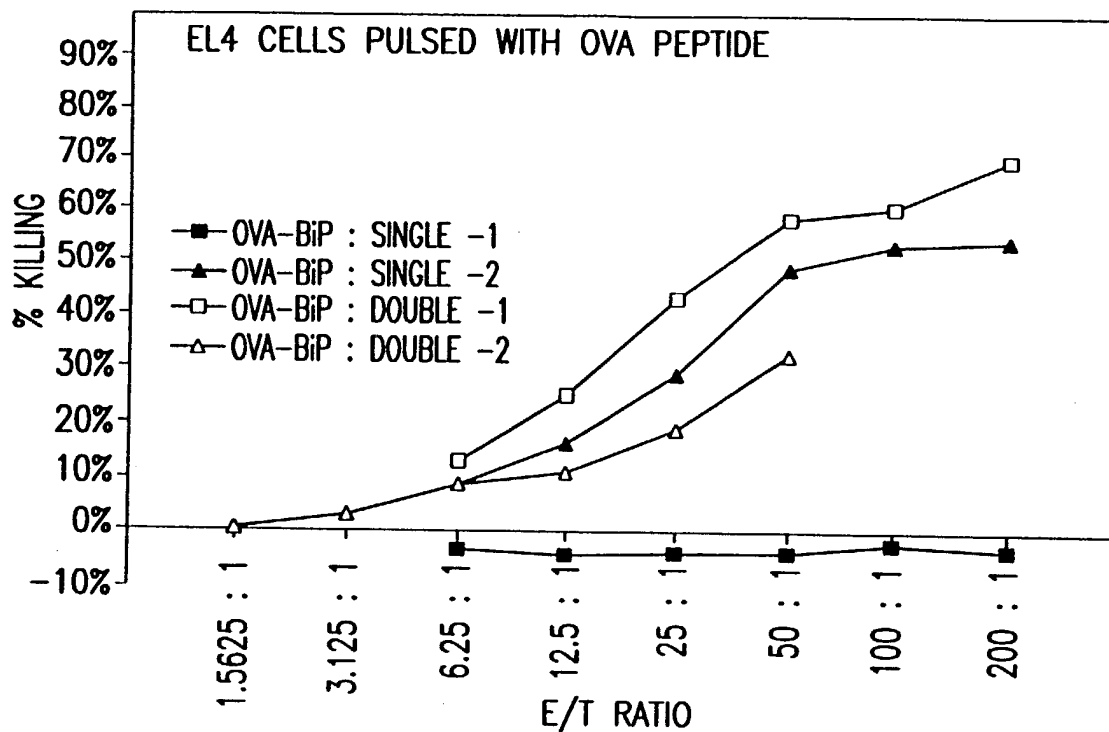


FIG.5A

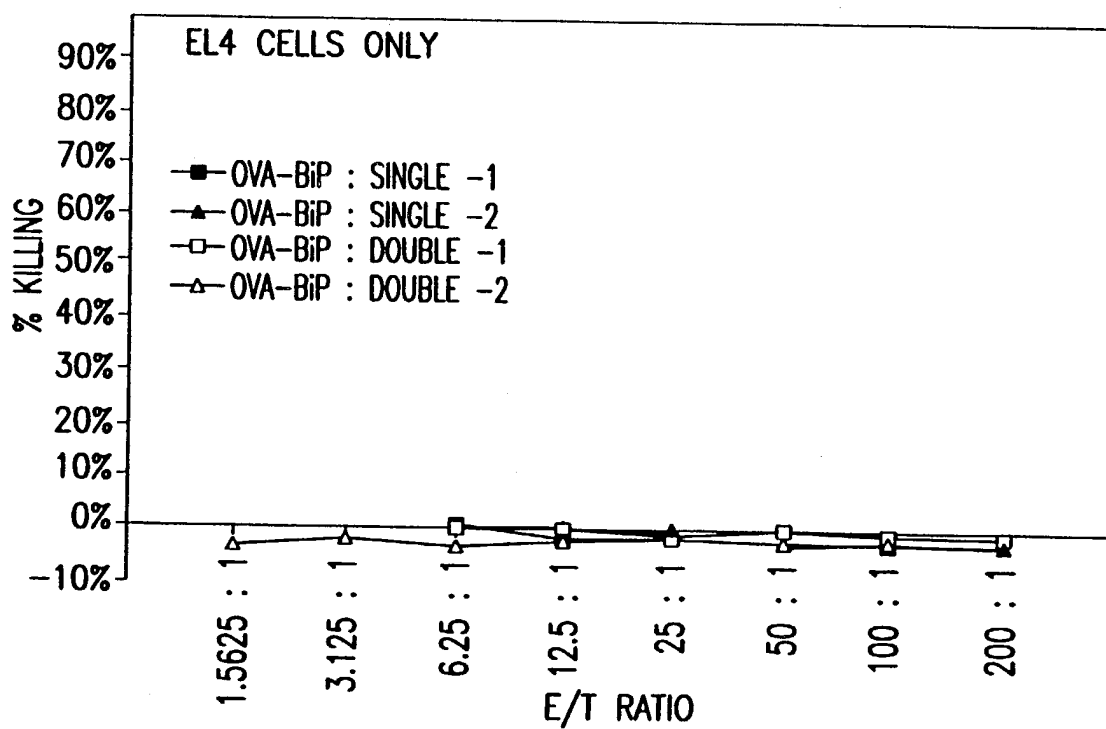


FIG.5B



10053520.1.20902

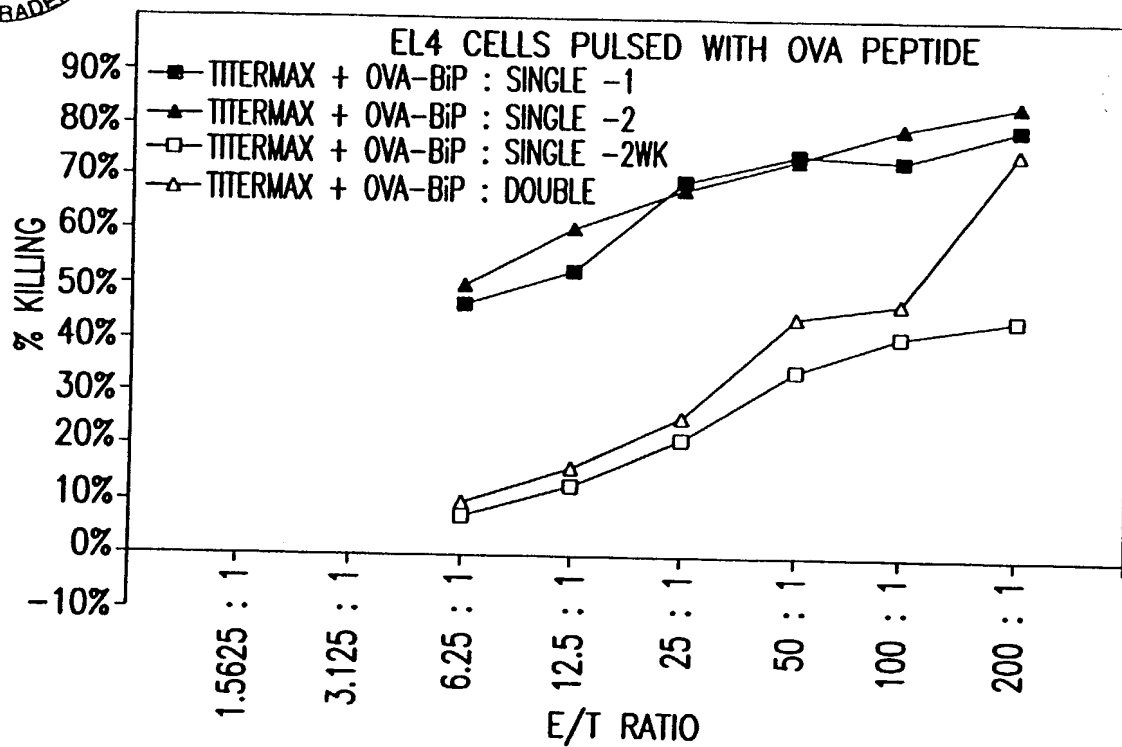


FIG.6A

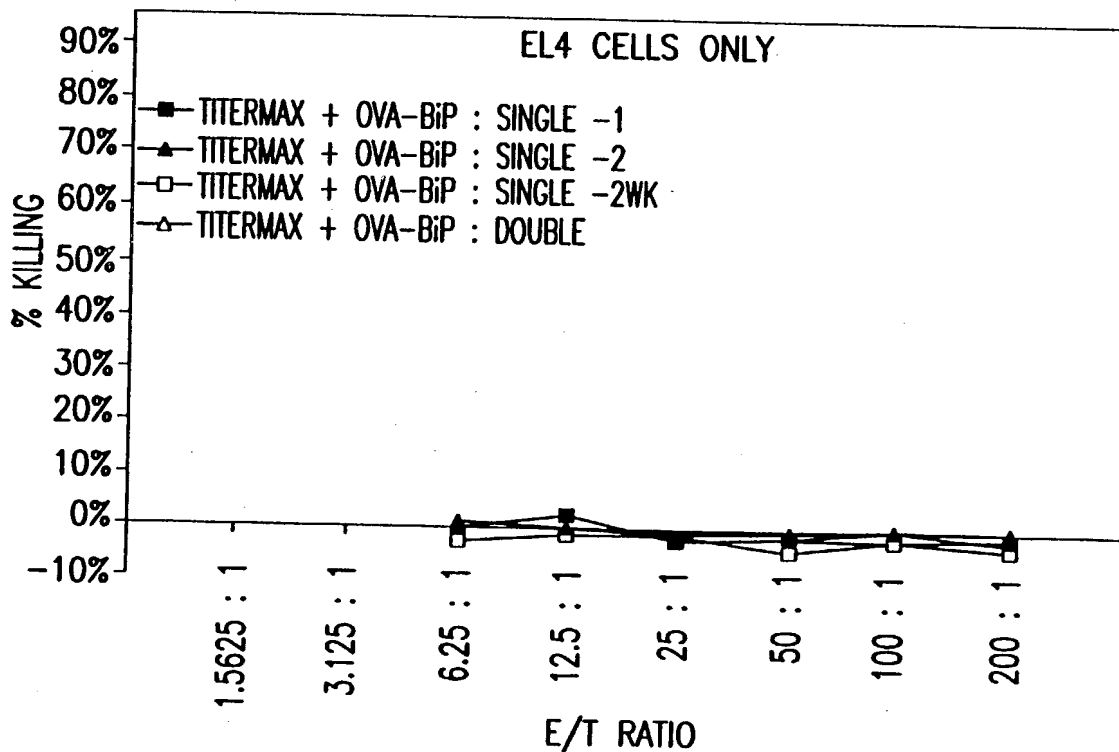


FIG.6B

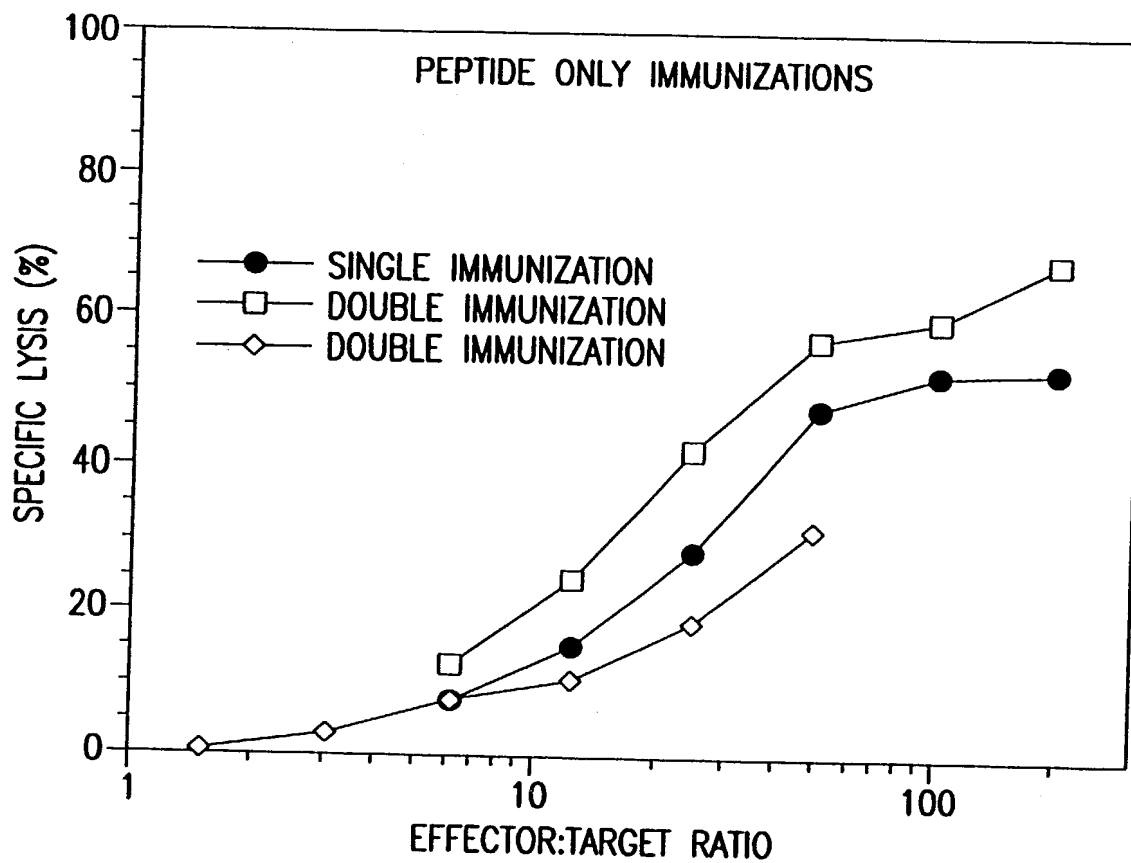


FIG.7



10055520 . 1.20902

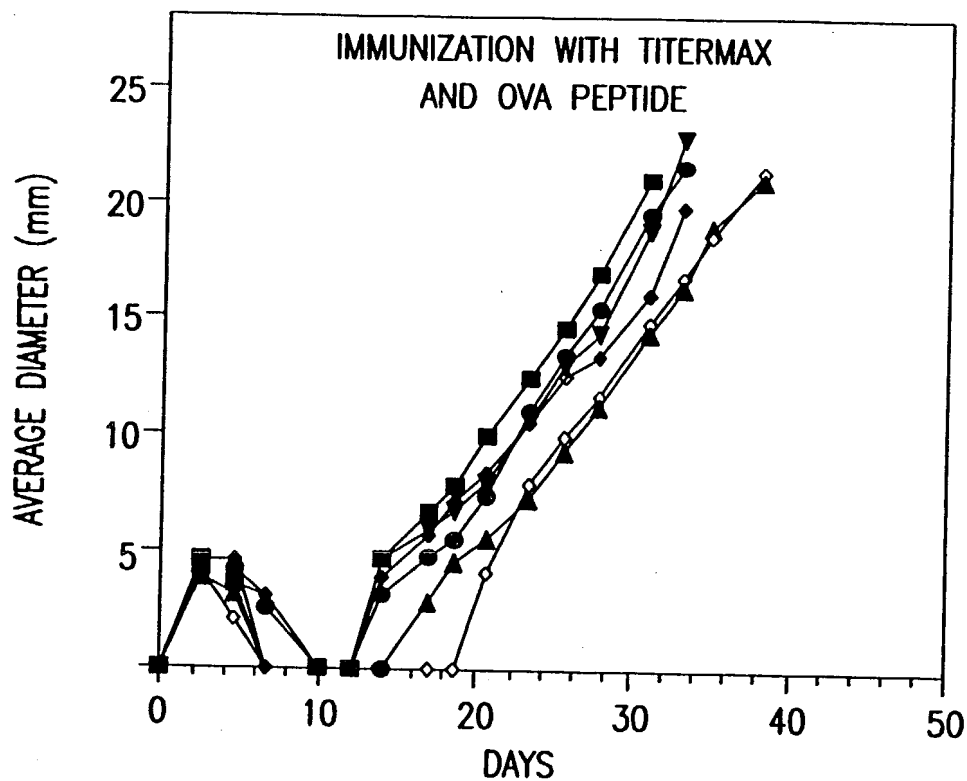


FIG.8A

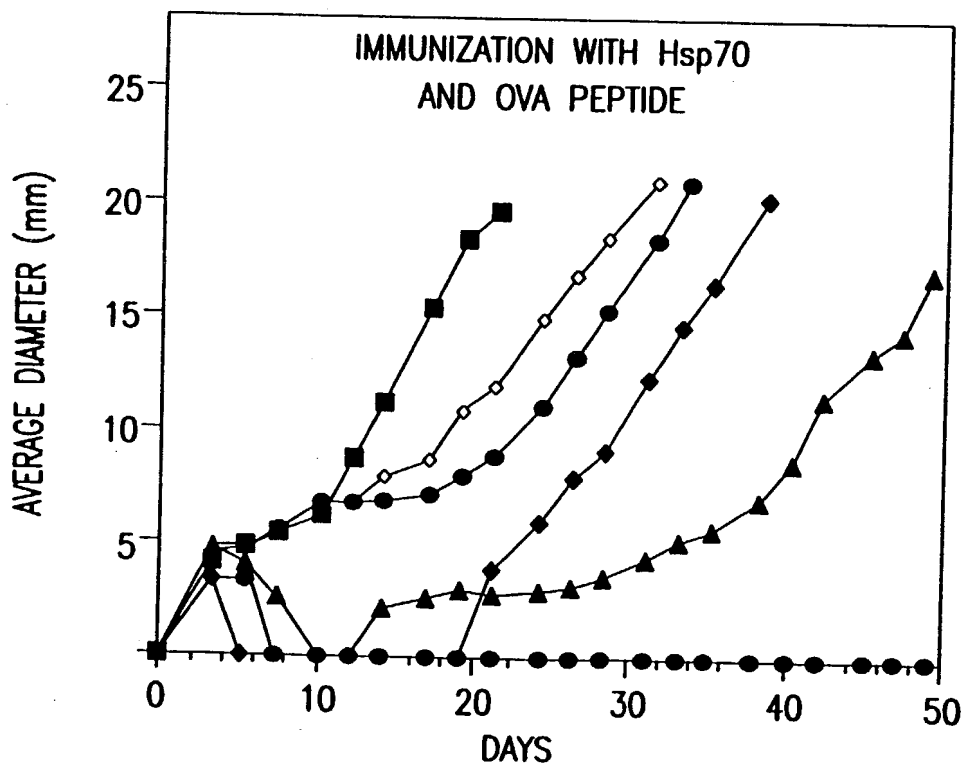


FIG.8B



10053520 120902

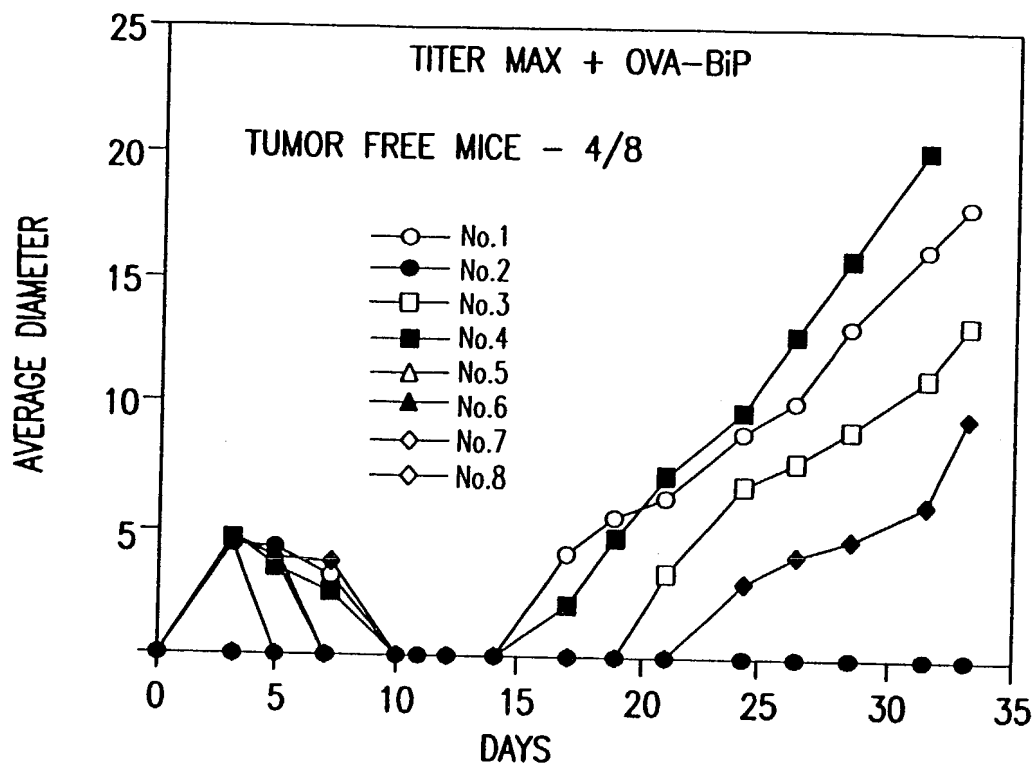


FIG.8C

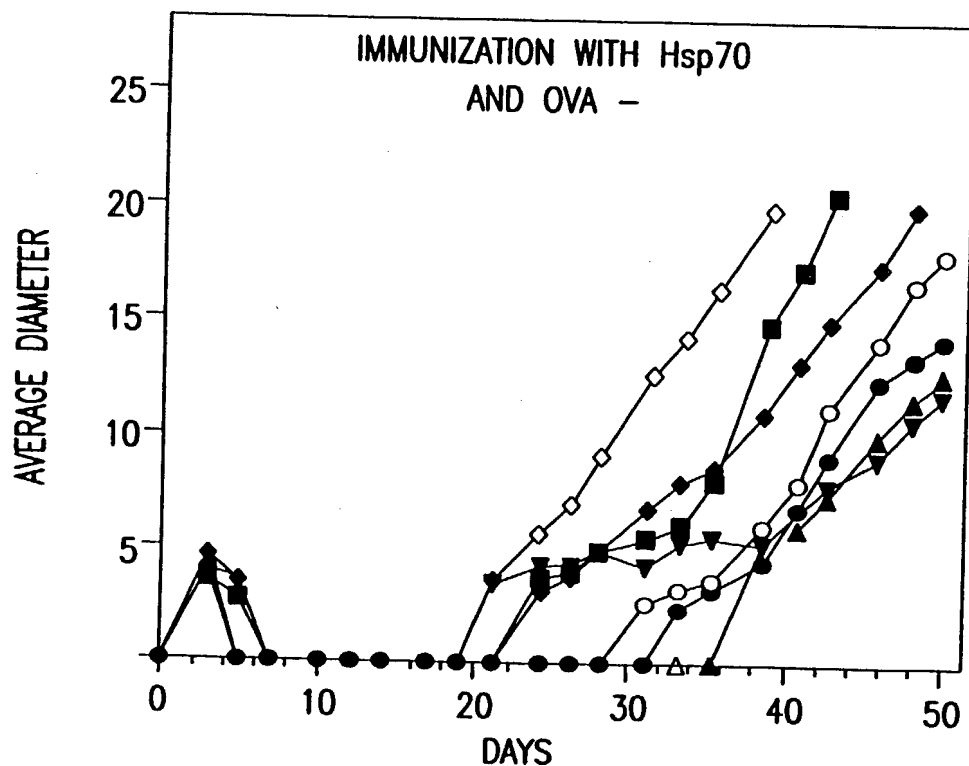


FIG.8D

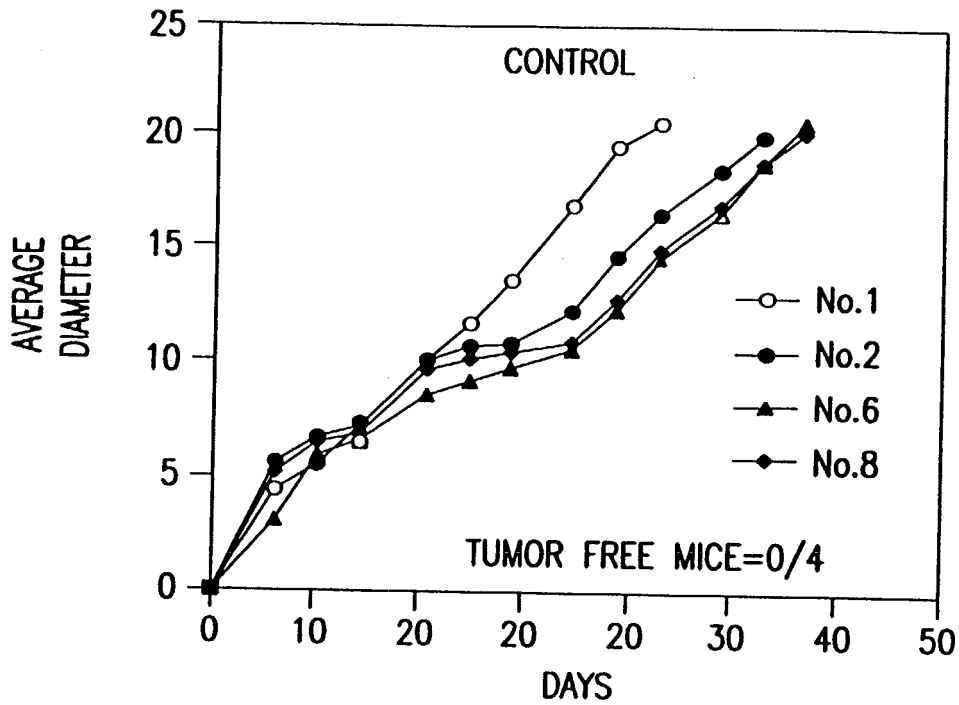


FIG.8E

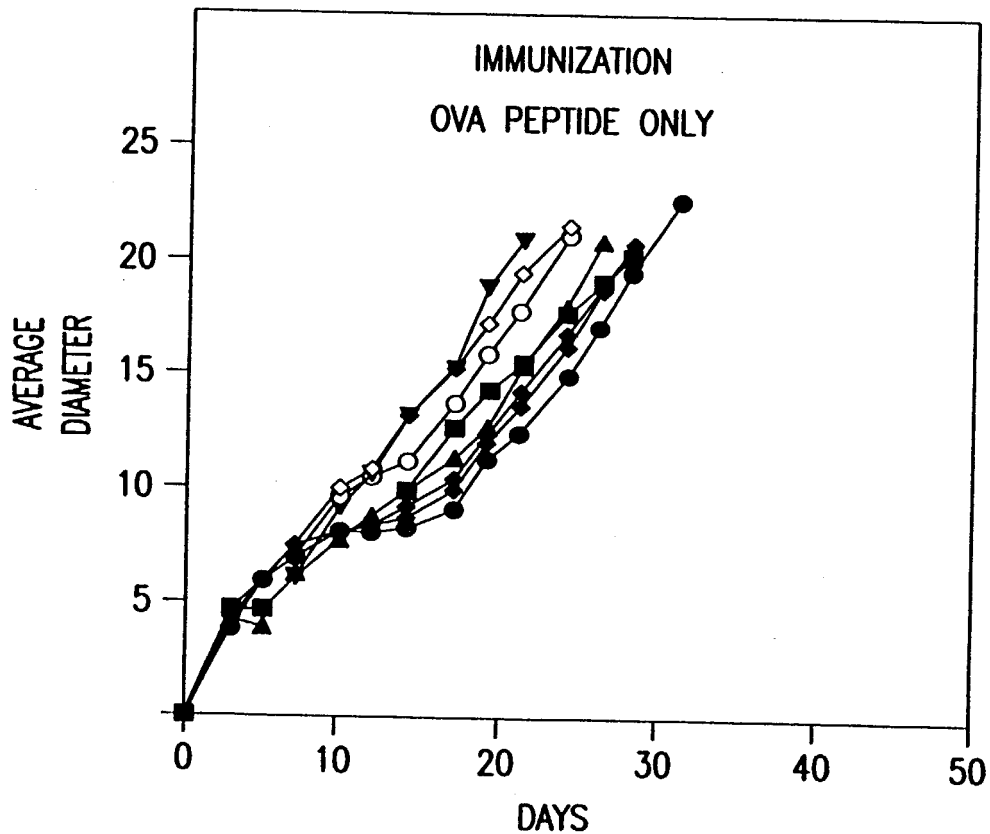


FIG.8F

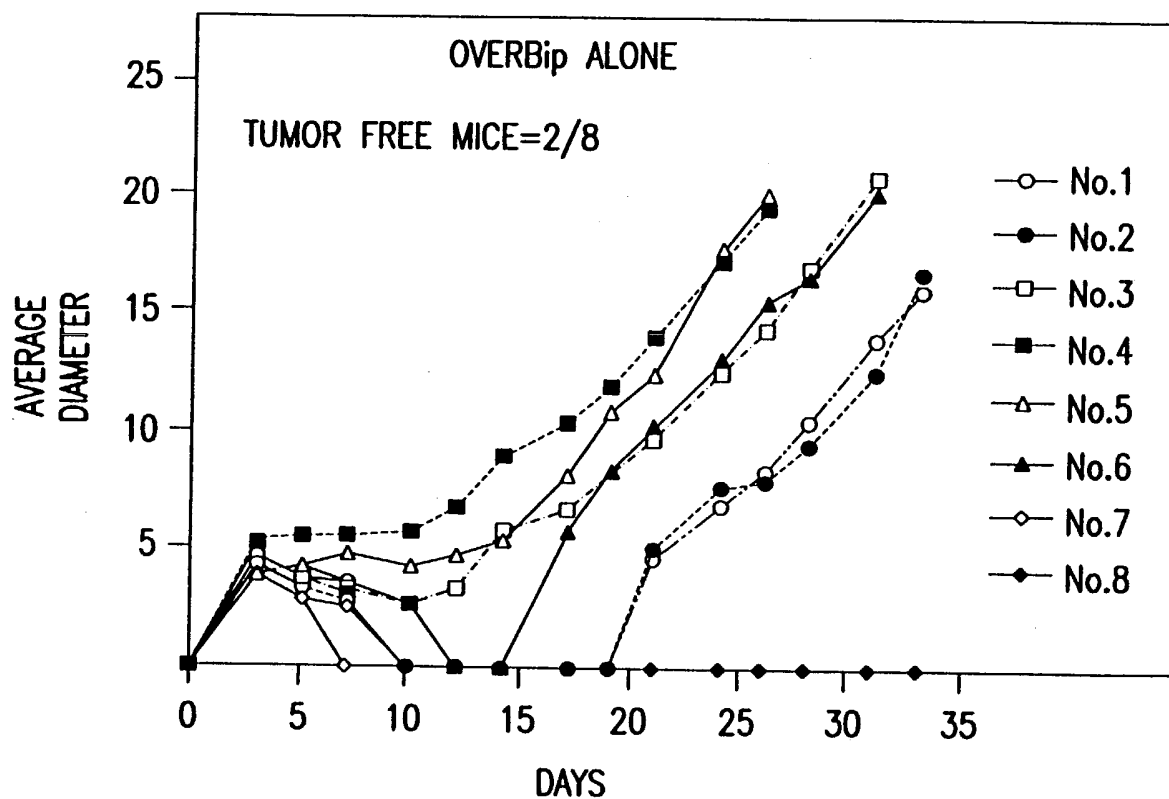


FIG.8G





10053520 . 120902

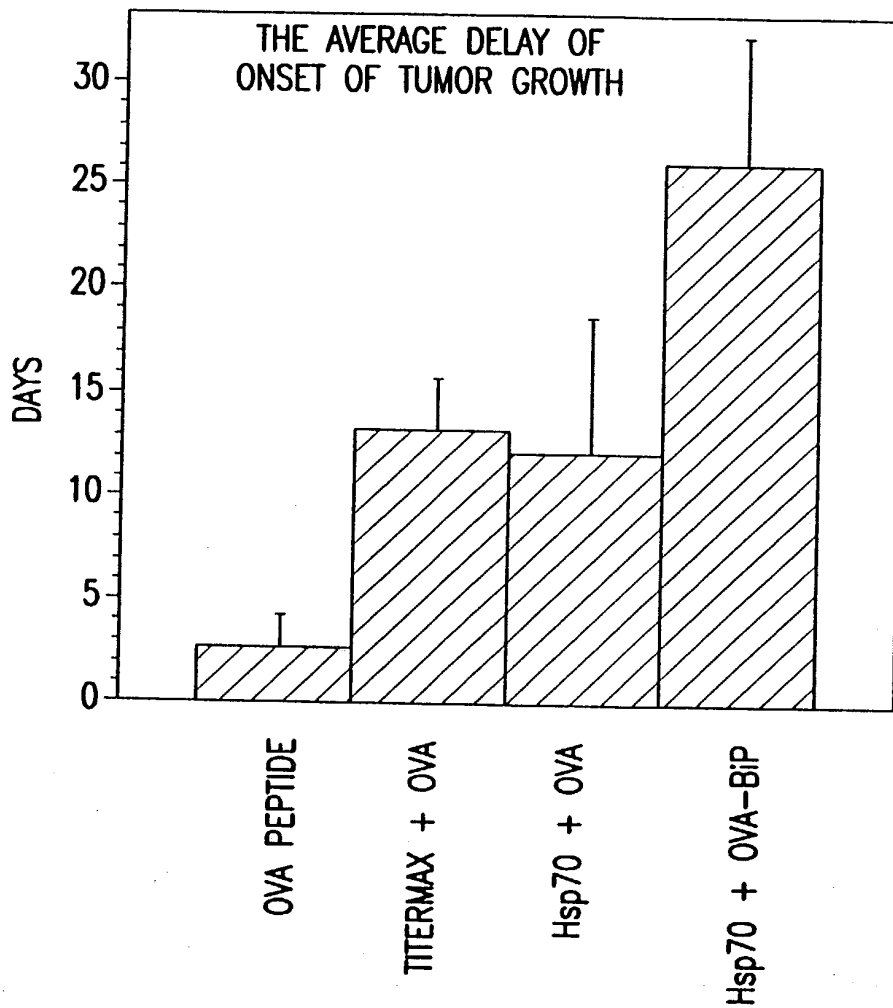
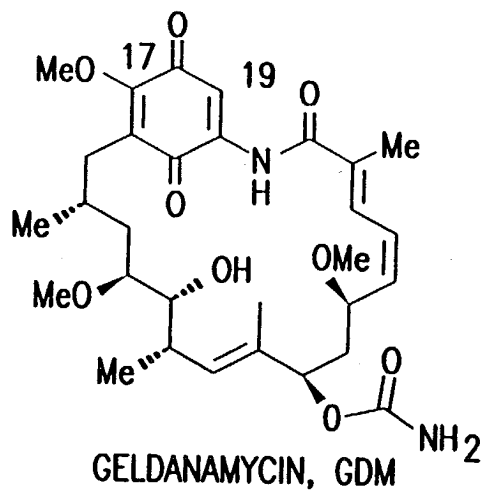
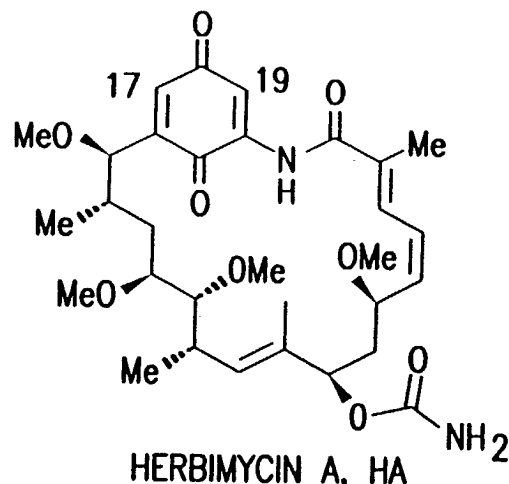


FIG.8H

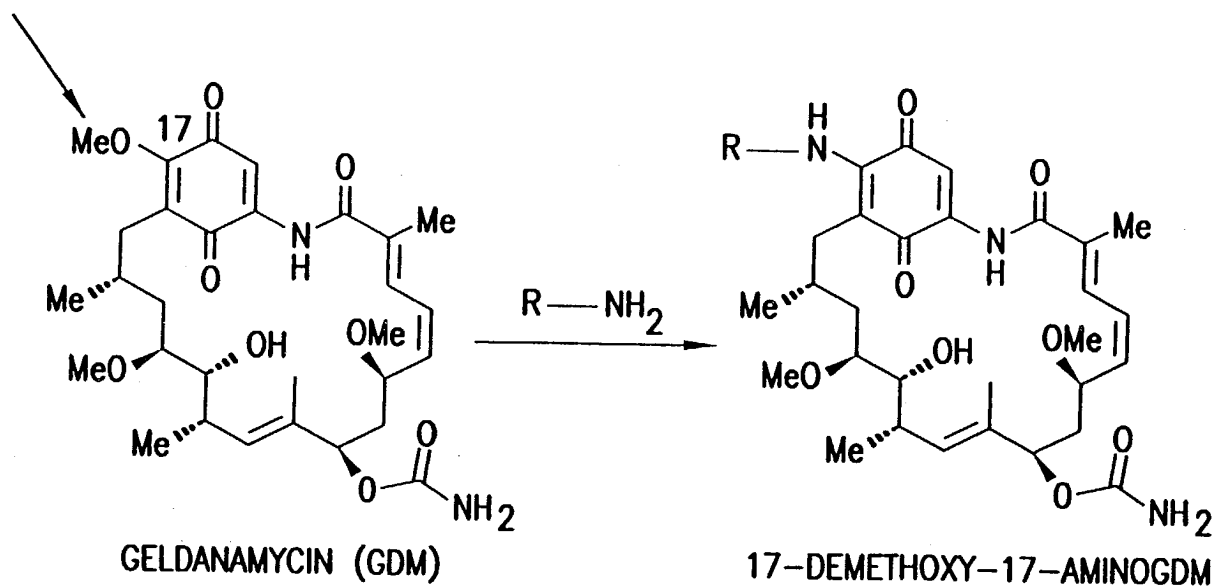


GELDANAMYCIN, GDM



HERBIMYCIN A, HA

FIG.9A



GELDANAMYCIN (GDM)

17-DEMETHOXY-17-AMINO GDM

FIG.9B

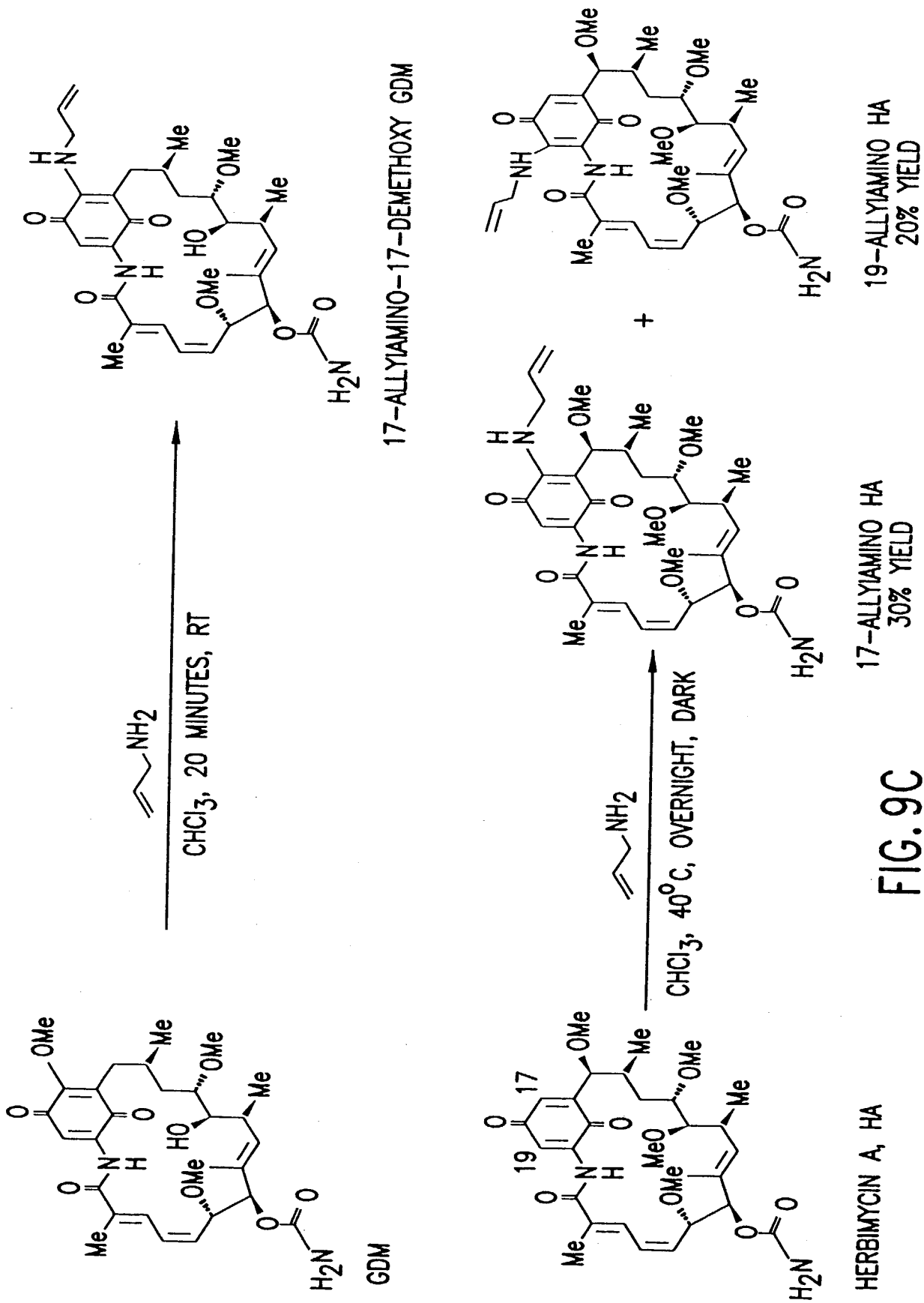
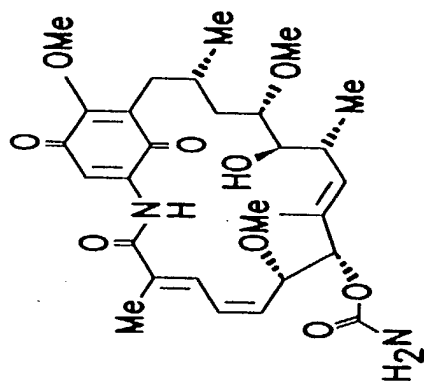
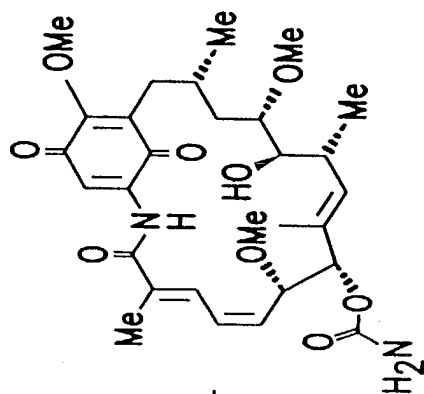


FIG. 9C

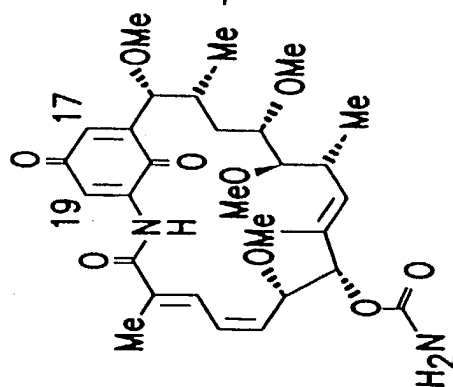
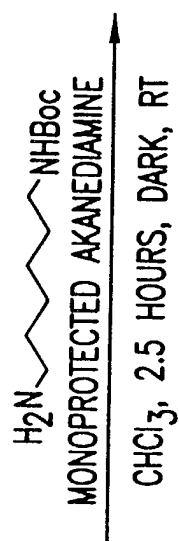
HERBIMYCIN A, HA



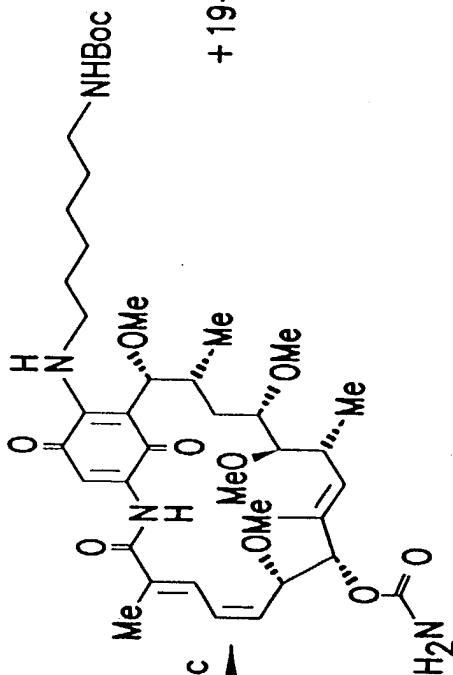
GELDANAMYCIN, GDM



AMINOTETHERED GDM



HERBIMYCIN A, HA



17-AMINOHEXYLAMINO HA



FIG.9D

A circular black ink stamp. The outer ring contains the text "O I P E" at the top and "PATENT &amp; TRADEMARK OFFICE" at the bottom. In the center, the date "DEC 09 2002" is stamped.

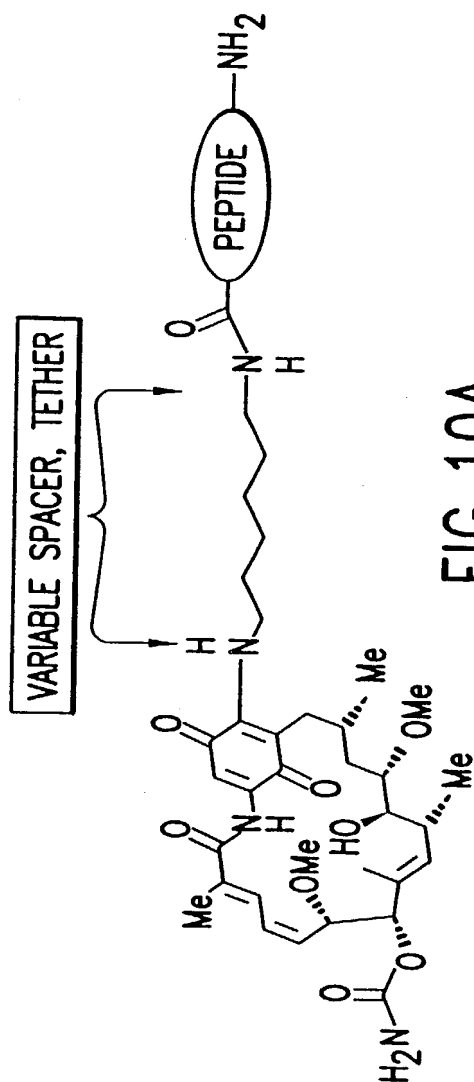


FIG. 10A

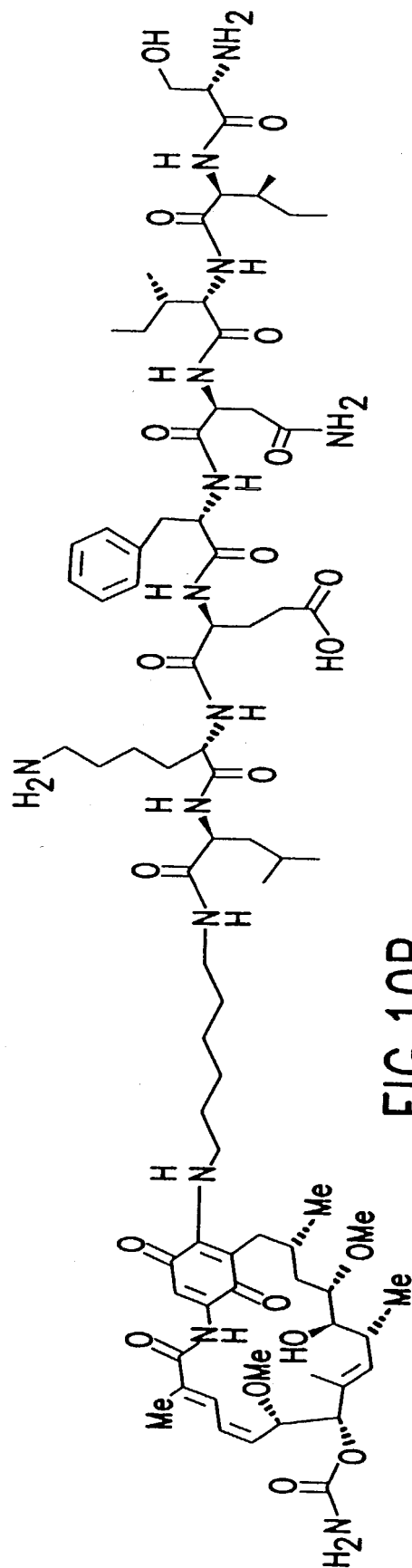
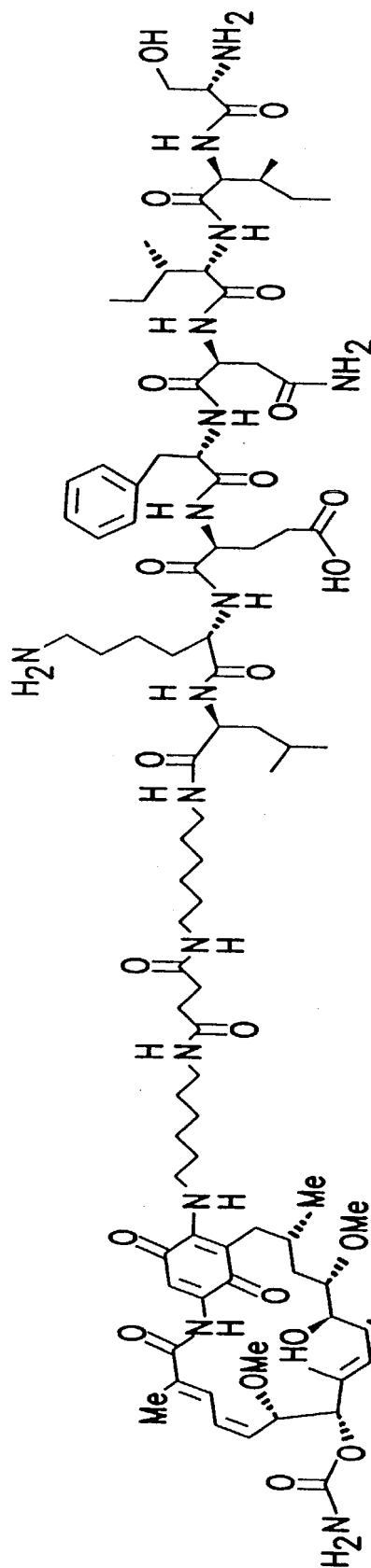
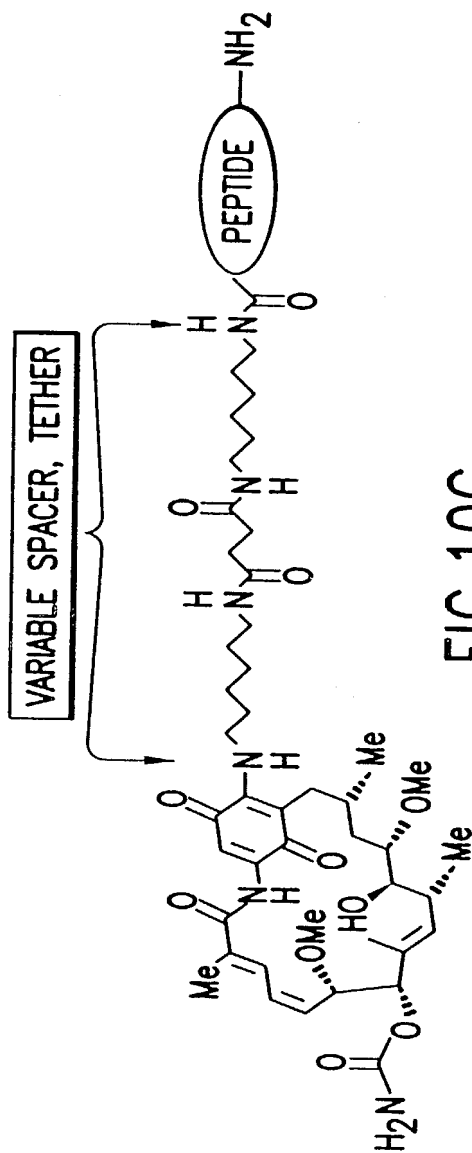


FIG. 10B



10053520, 320902



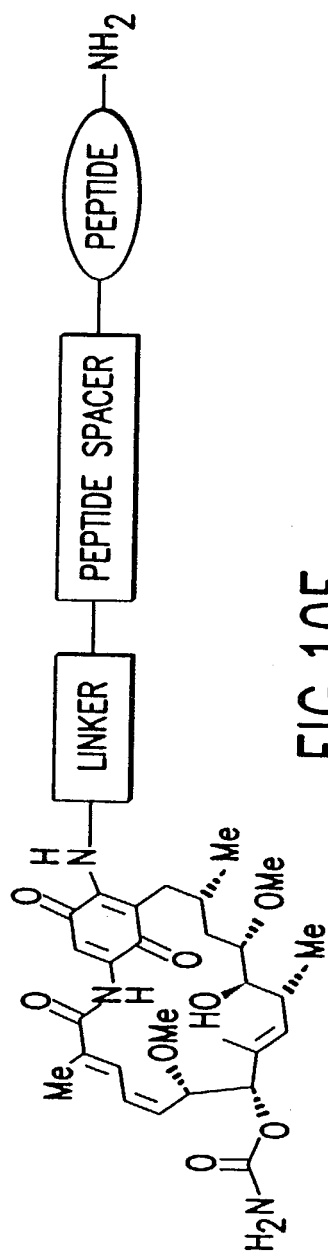


FIG. 10E

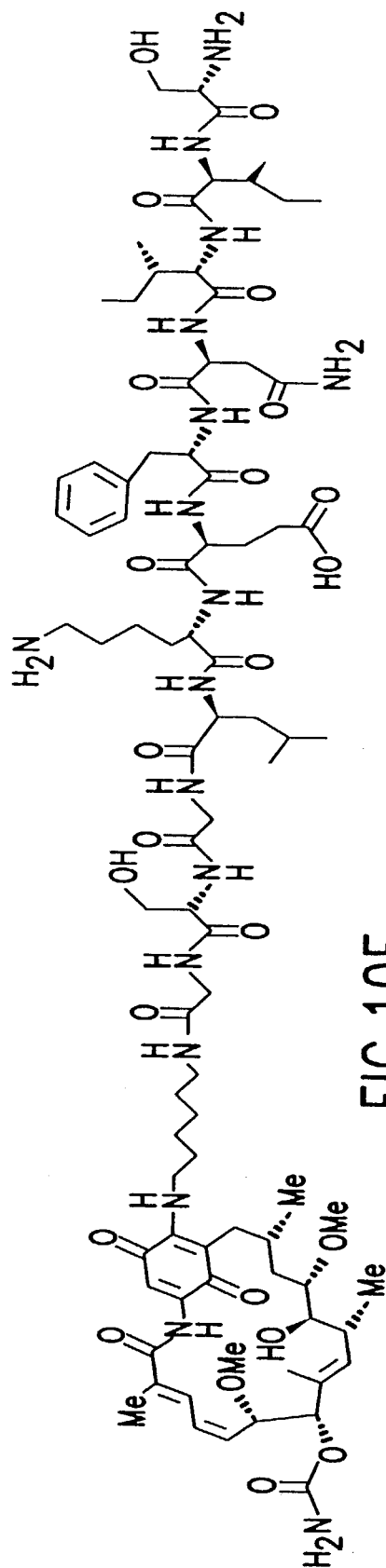
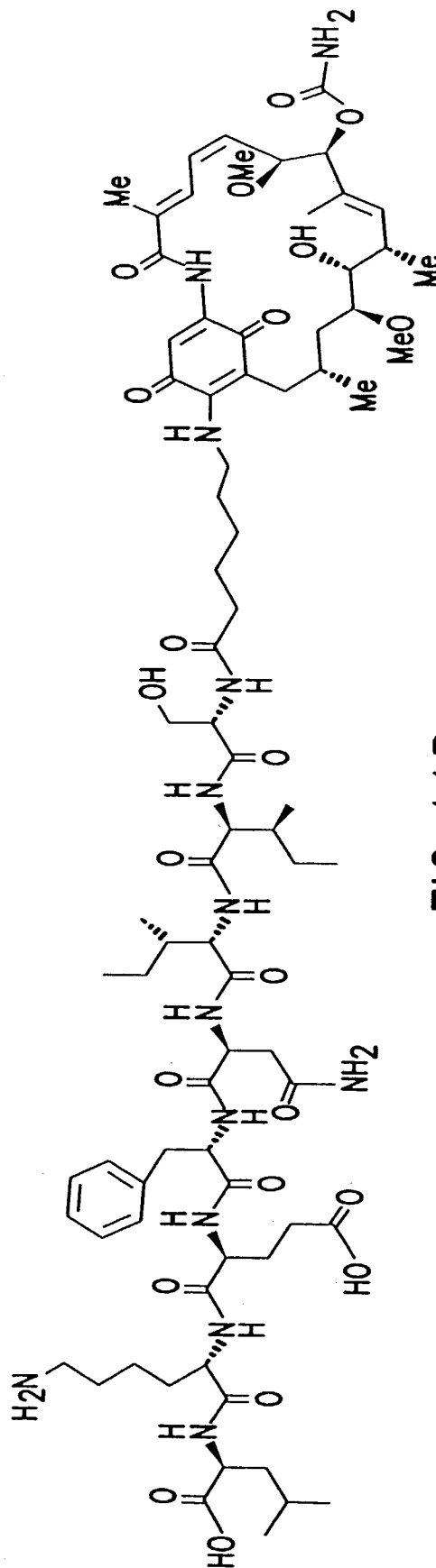
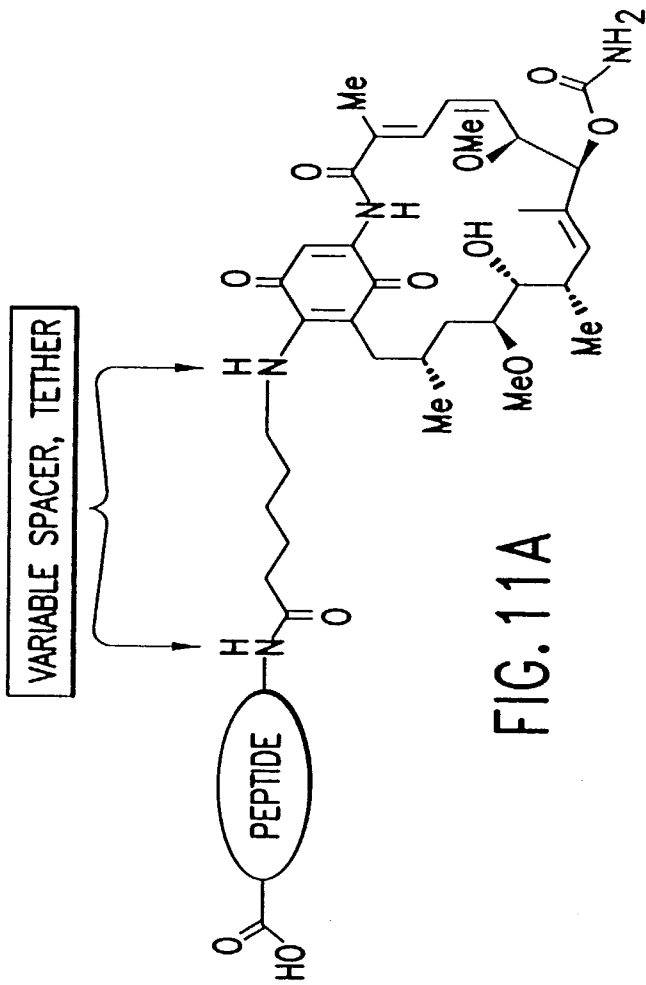


FIG. 10F





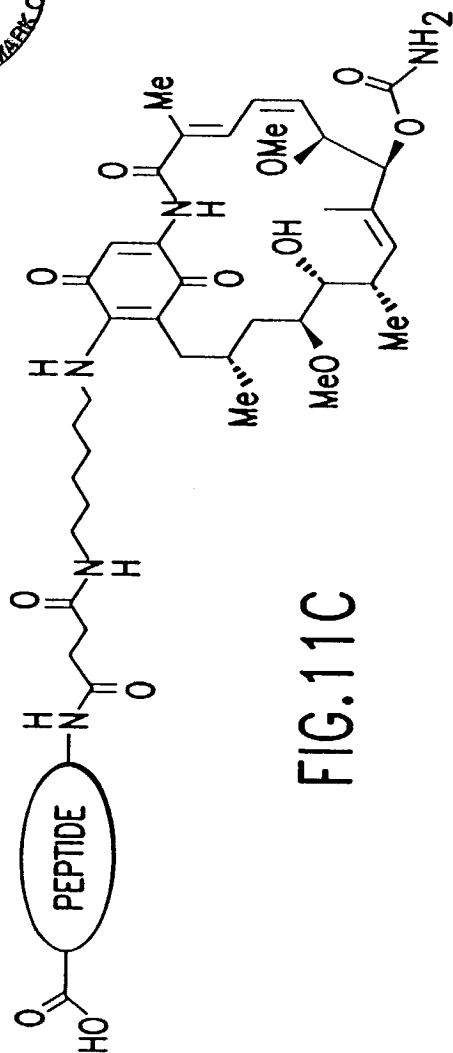


FIG.11C

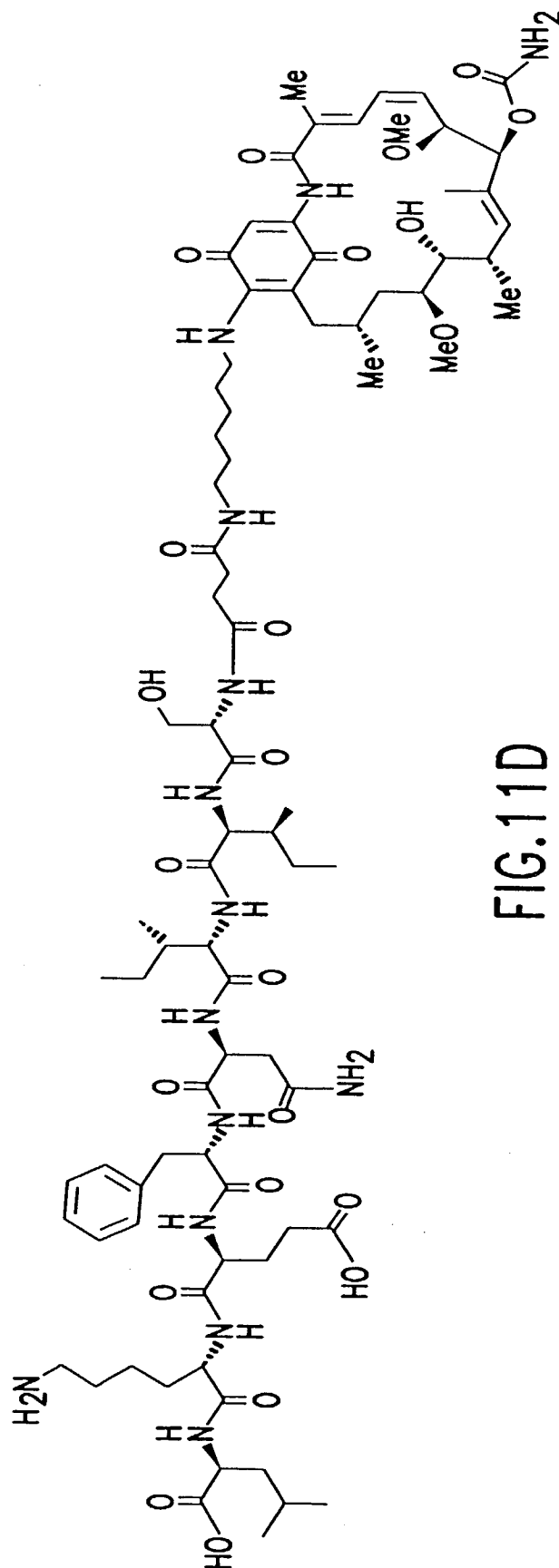


FIG.11D

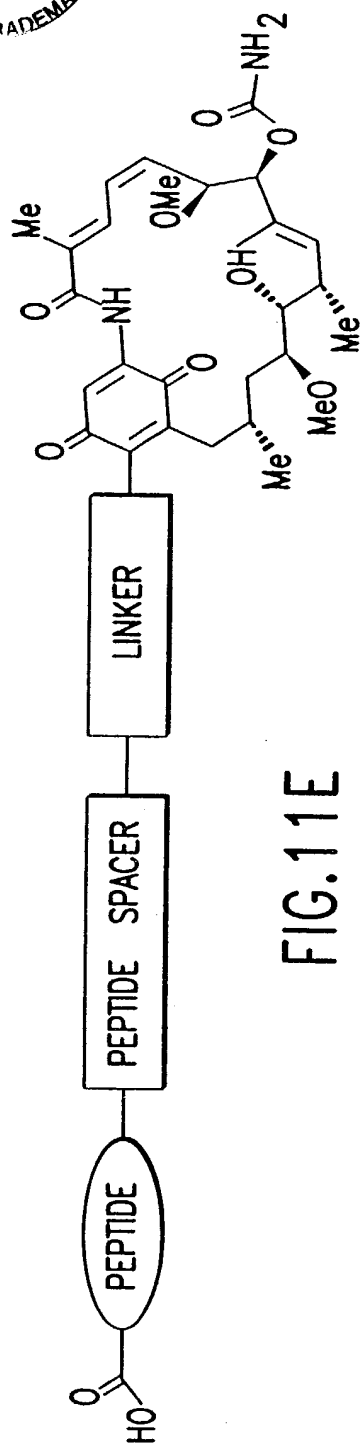


FIG. 11E

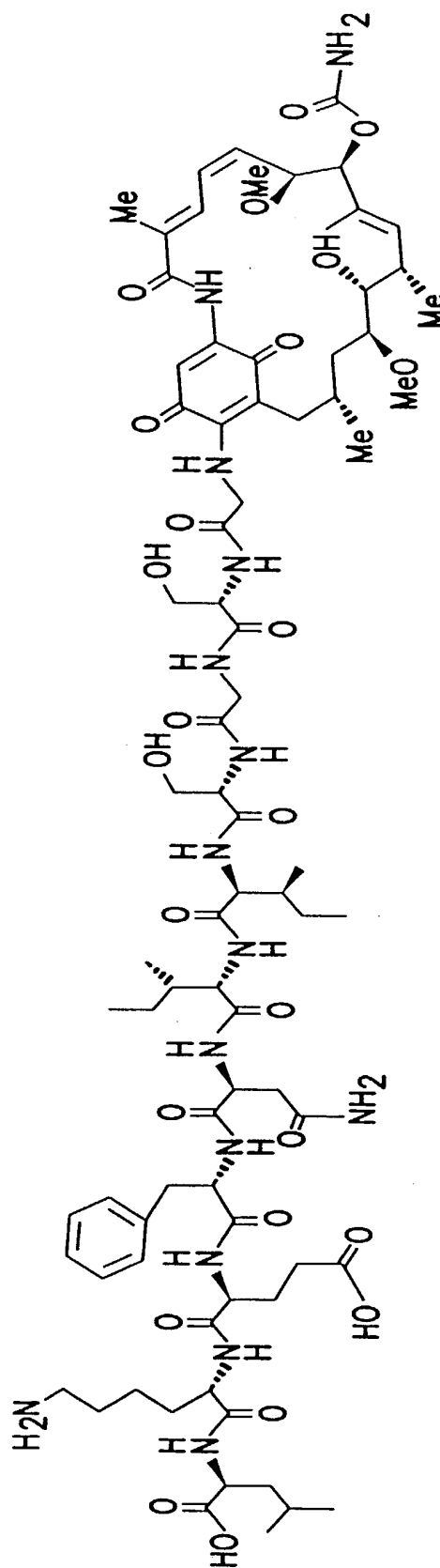


FIG. 11F

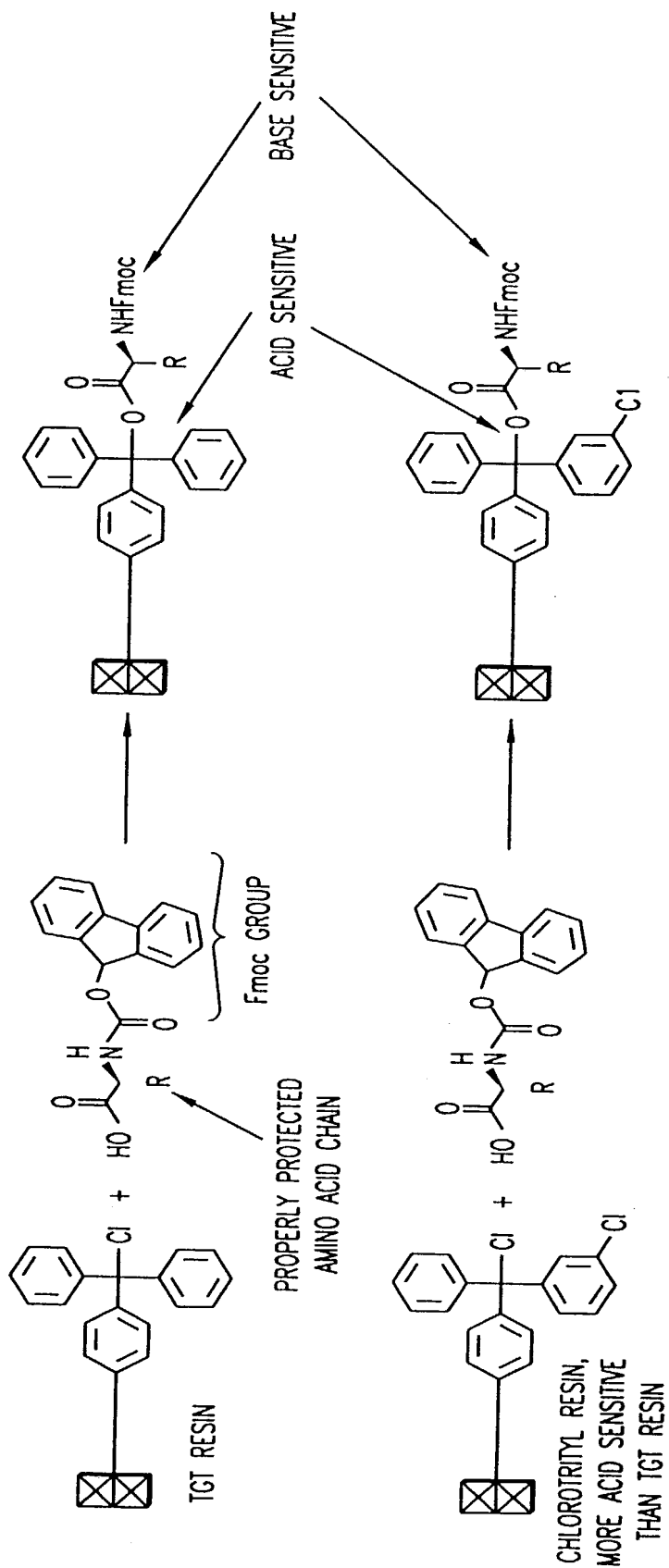


FIG. 12

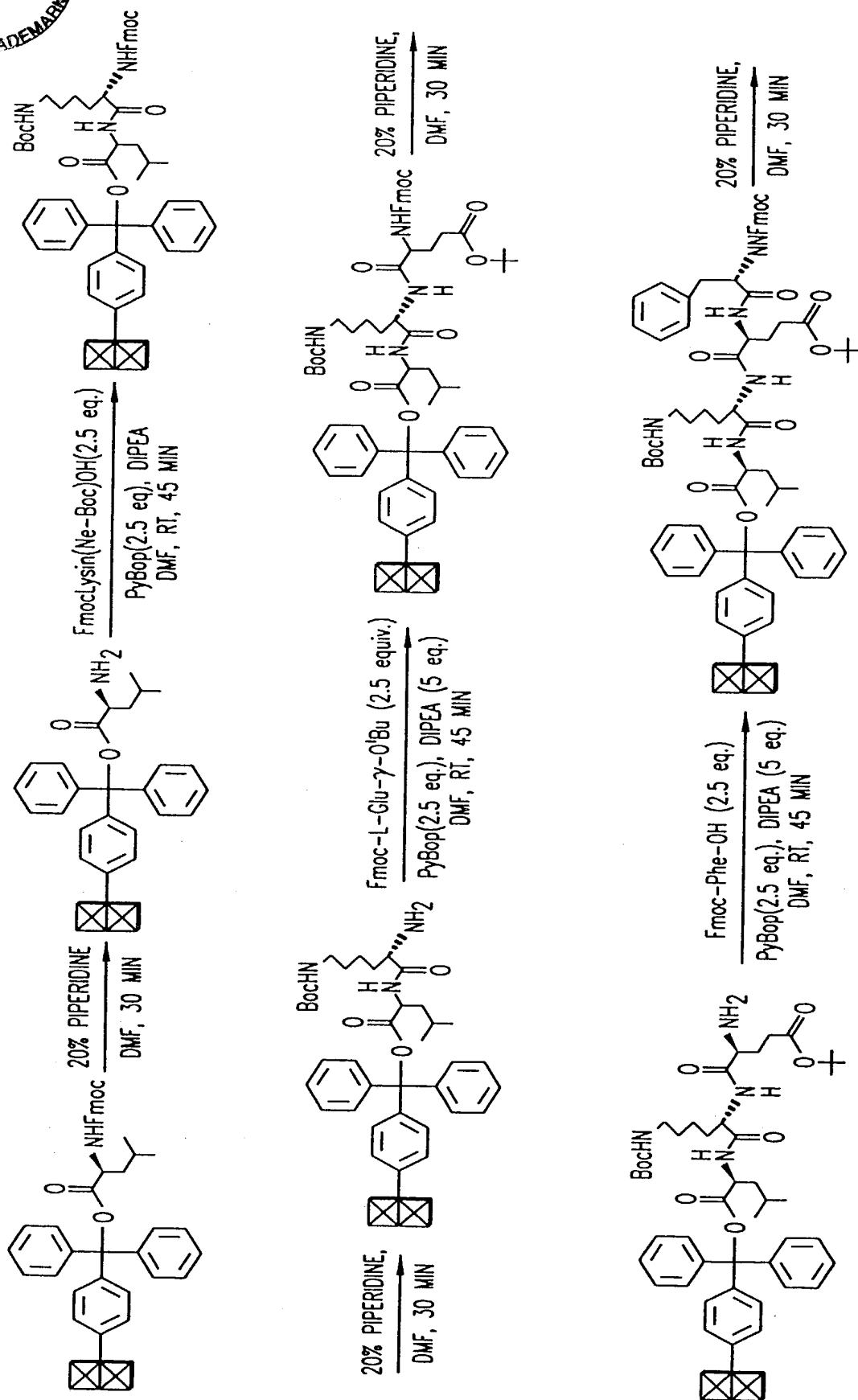


FIG. 13A



FIG. 13B

CONTINUED  
ON  
FIG. 13C

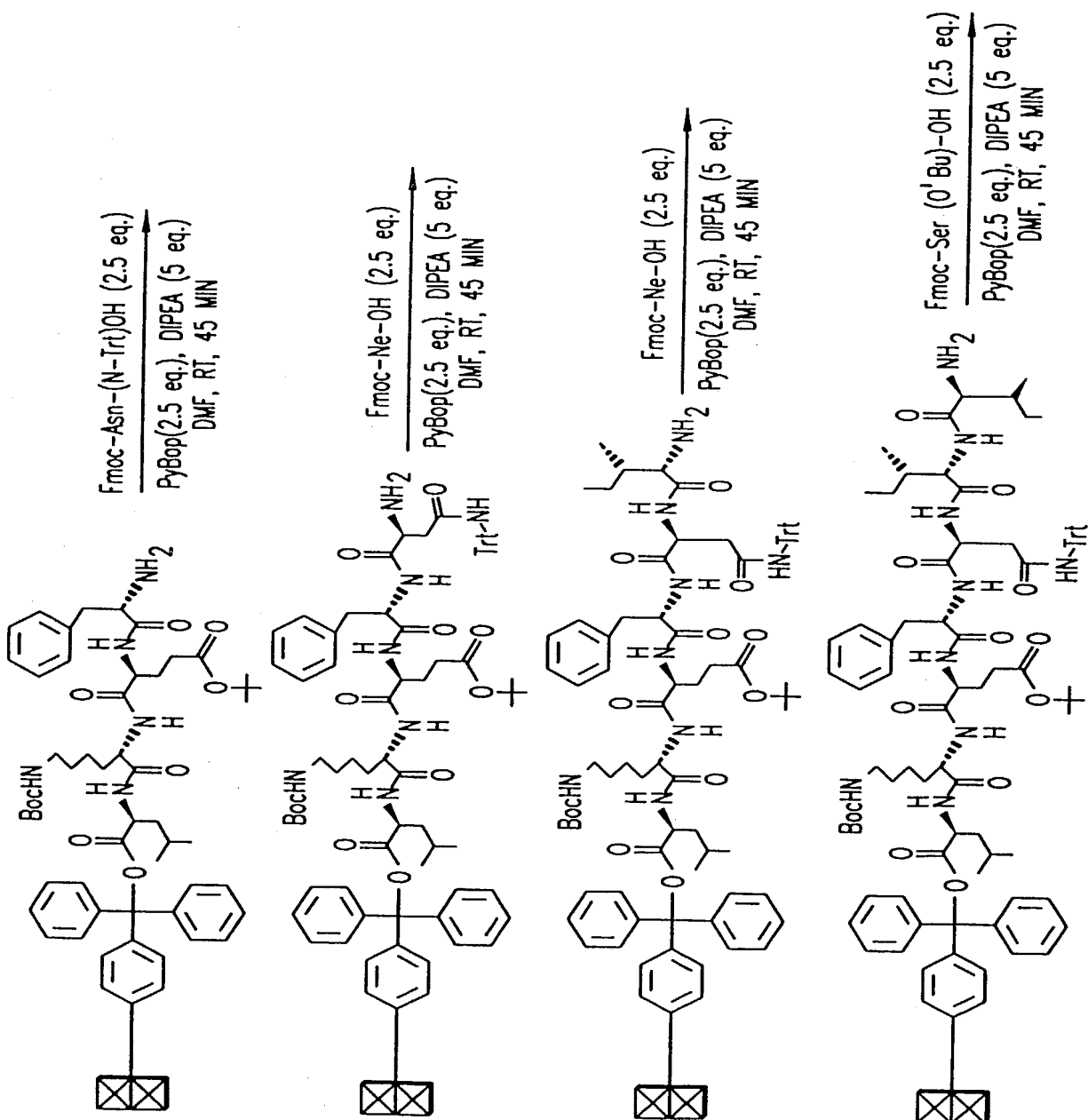
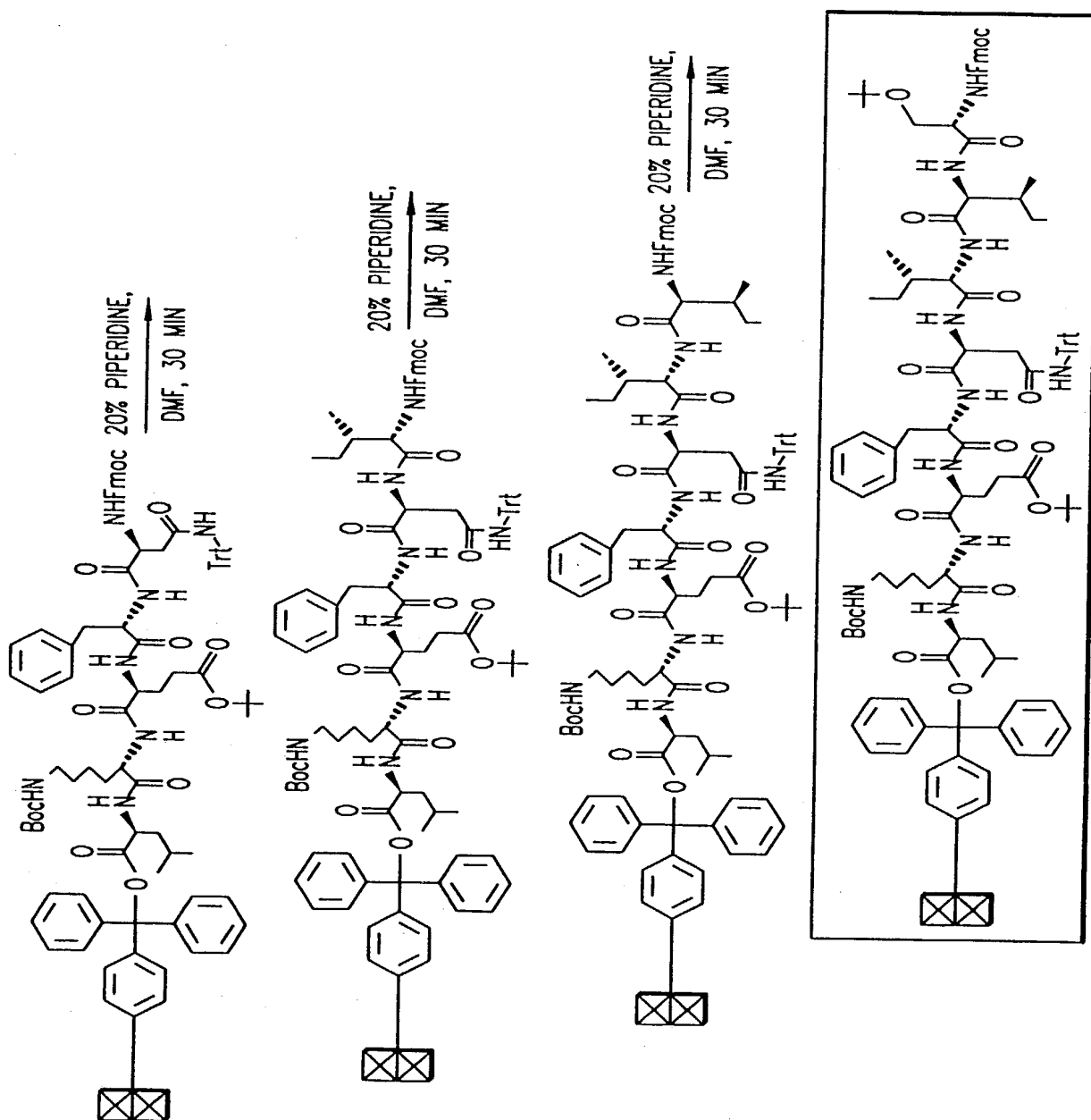




FIG. 13C



CONTINUED  
FROM  
FIG. 13B



10053520 . 120902

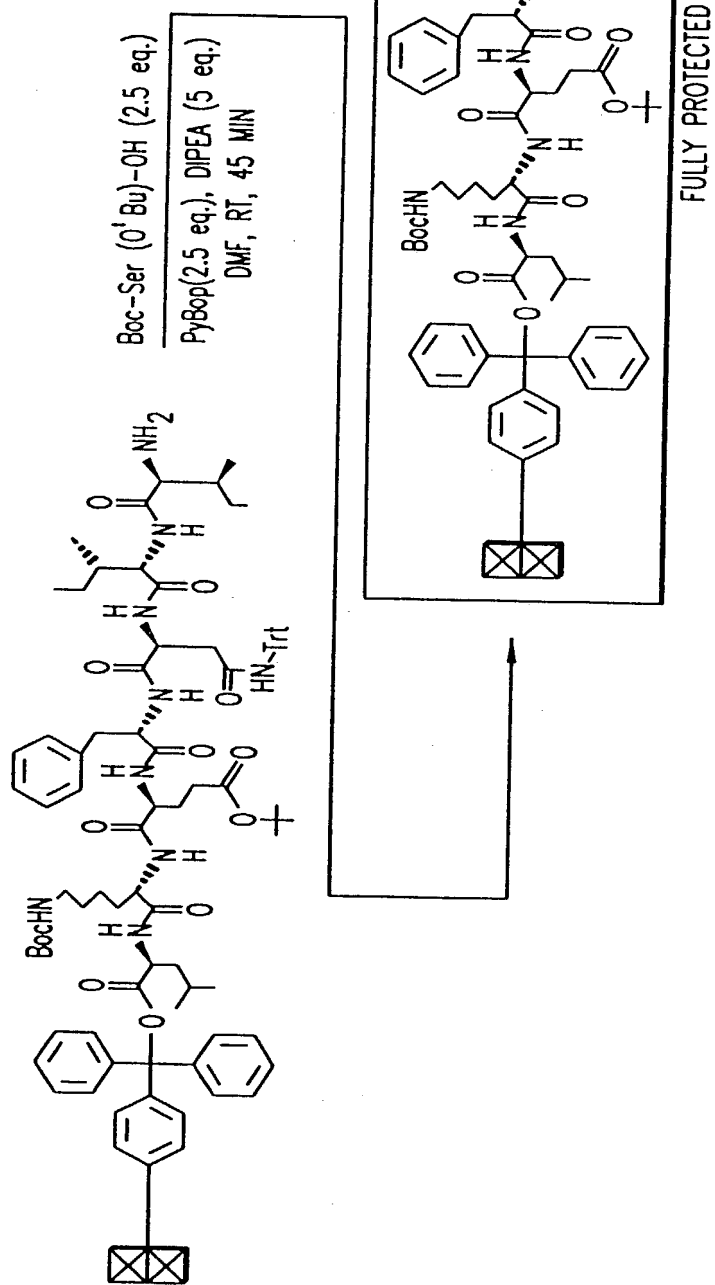


FIG.14A

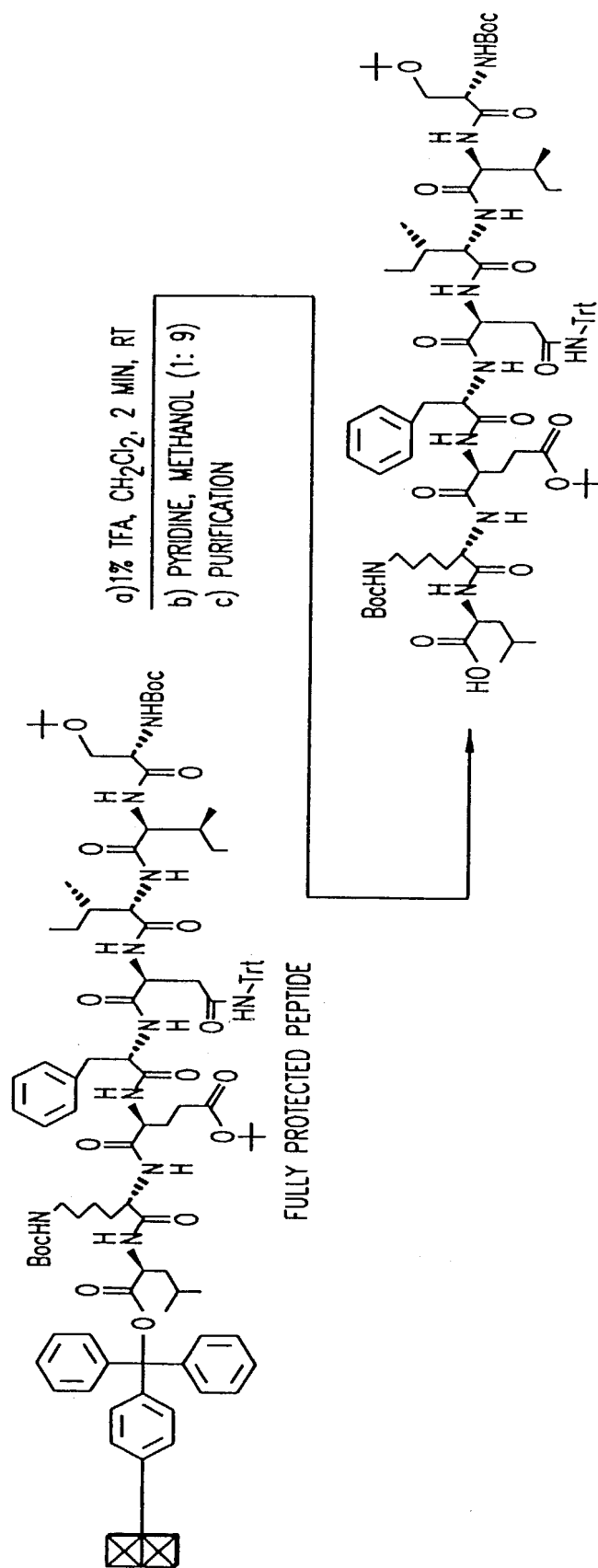
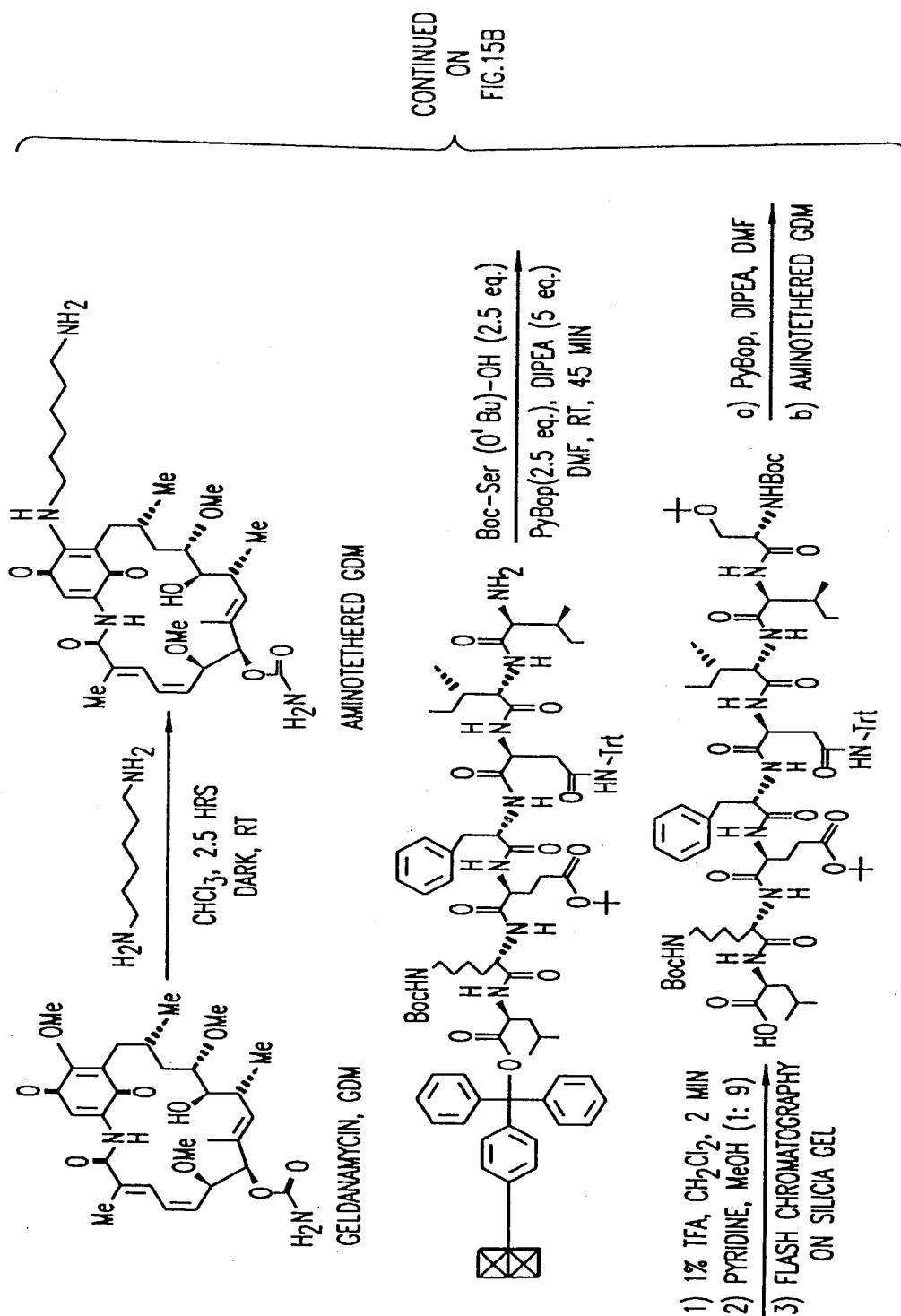


FIG.14B



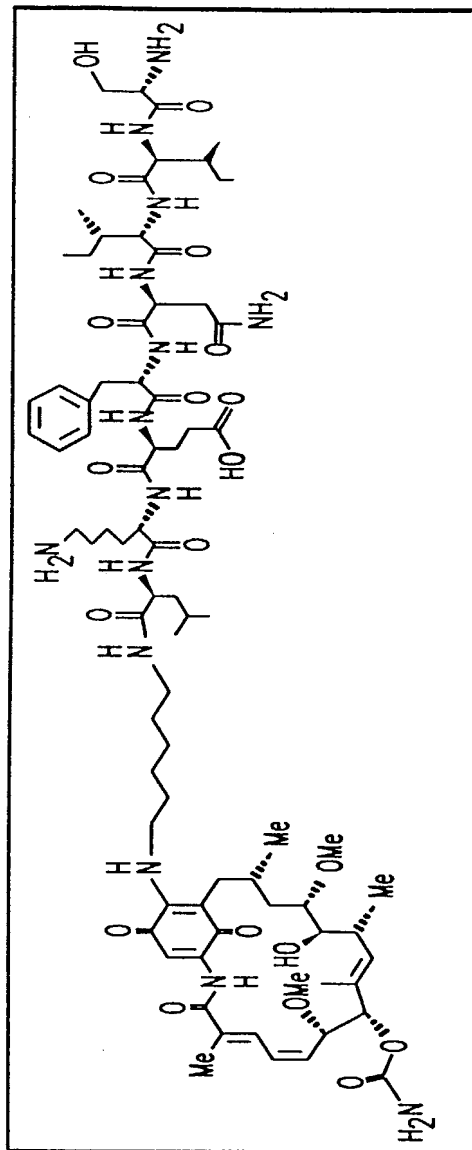
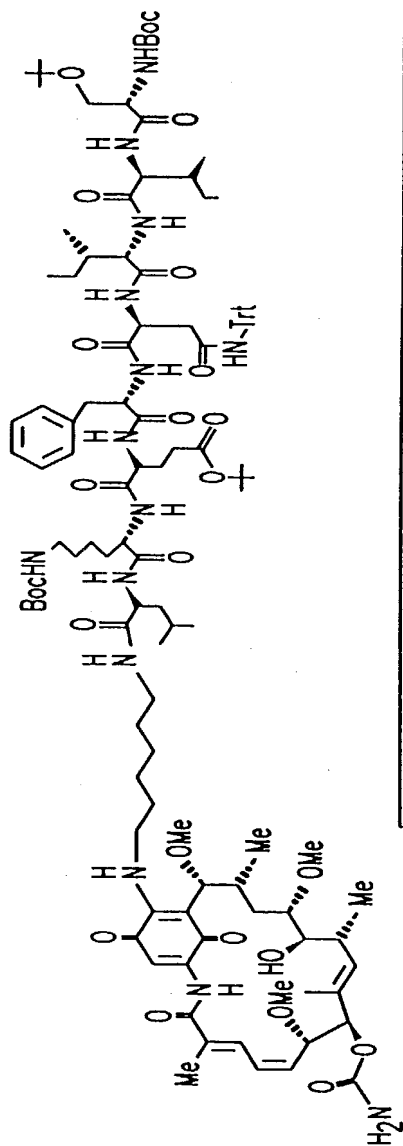
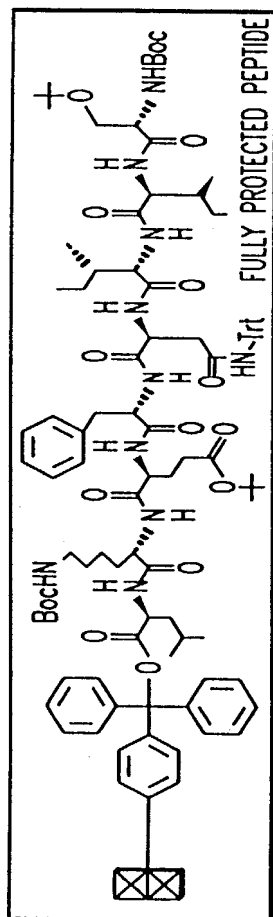


10053520.120902



CONTINUED  
ON  
FIG.15B

FIG.15A

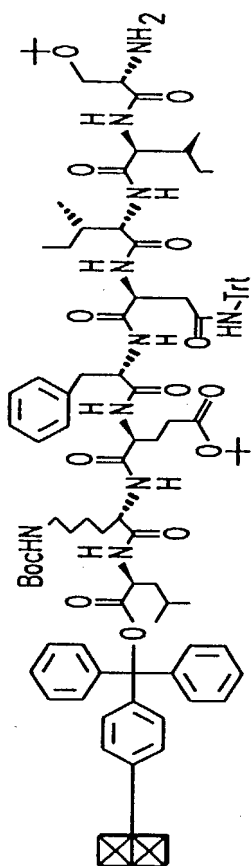


- 1) DEPROTECTION:  
95% TFA, 2.5% CH<sub>2</sub>Cl<sub>2</sub>, 2.5% TIPS
- 2) PURIFICATION

CONTINUED  
FROM  
FIG. 15A

FIG. 15B





PEPTIDE WITH TERMINAL AMINE FREE

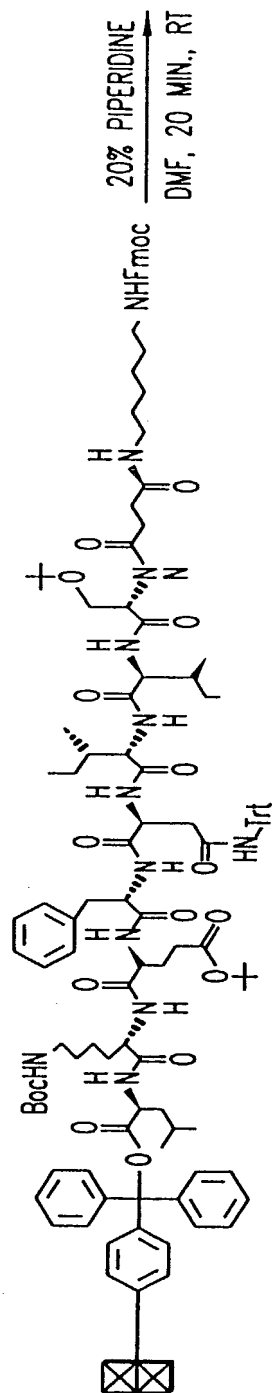
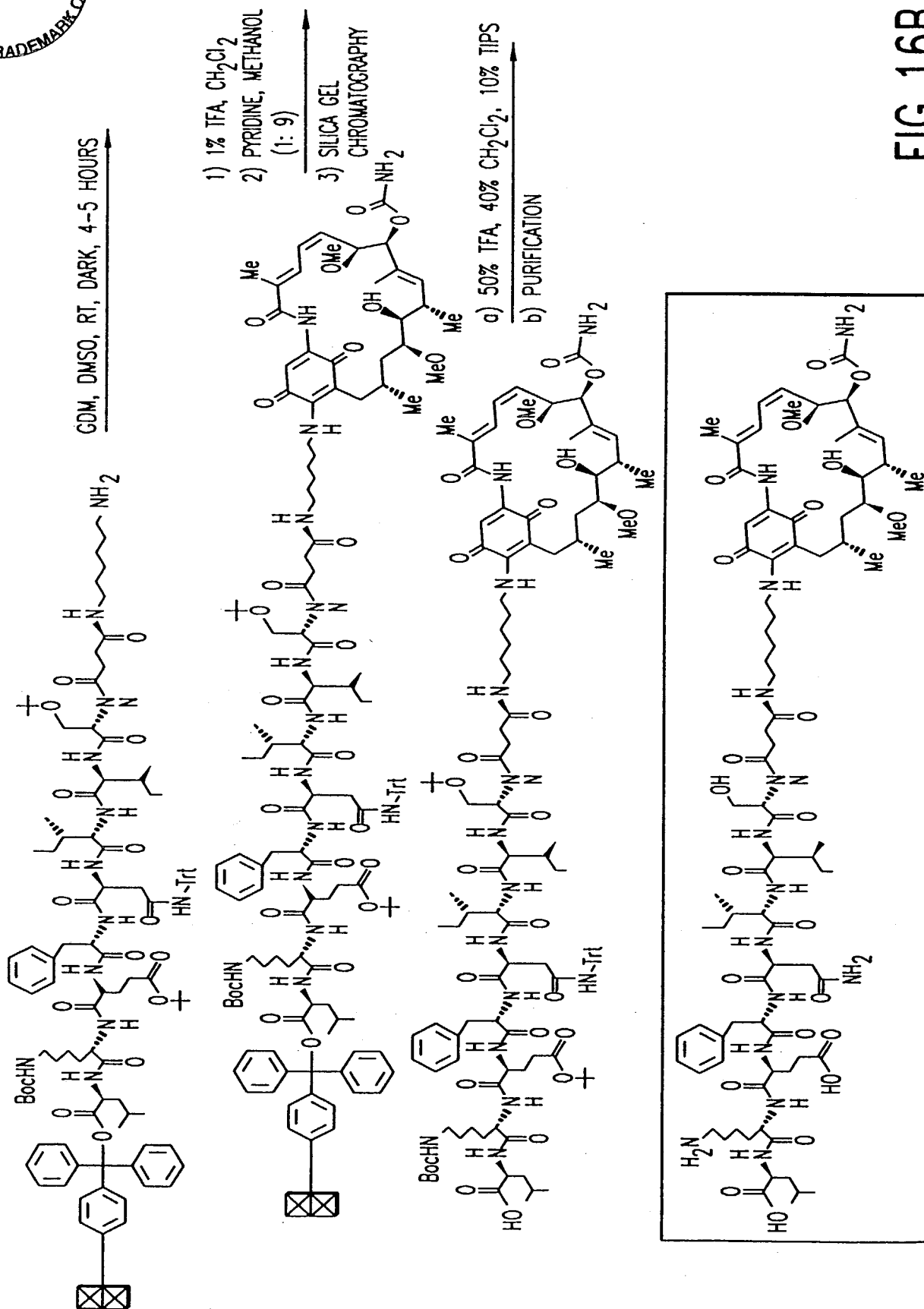


FIG. 16A-2



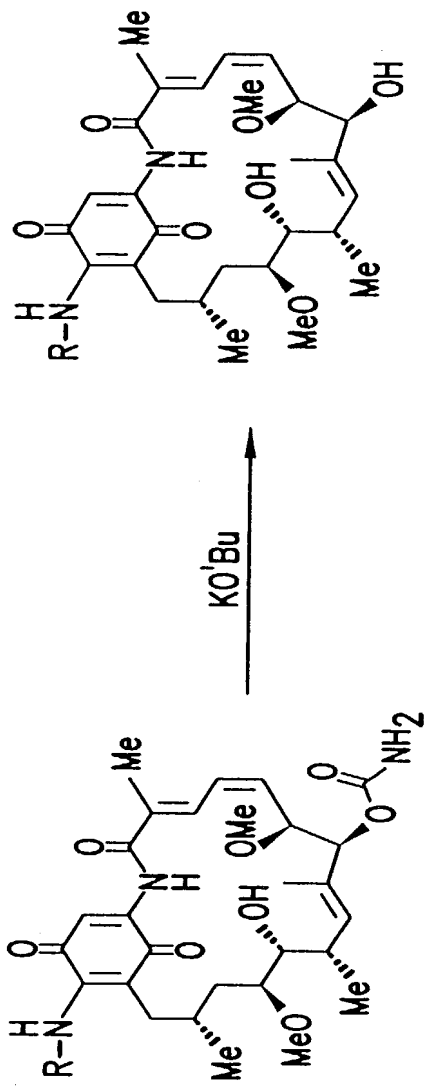
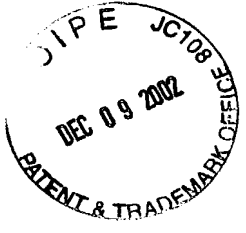


FIG. 17A

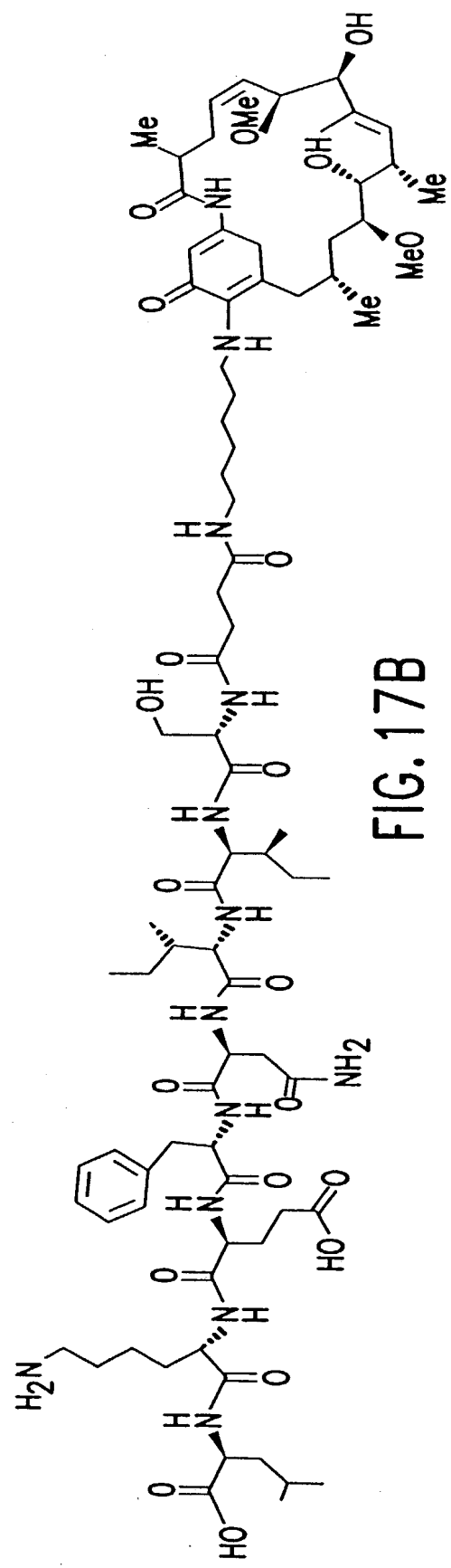


FIG. 17B

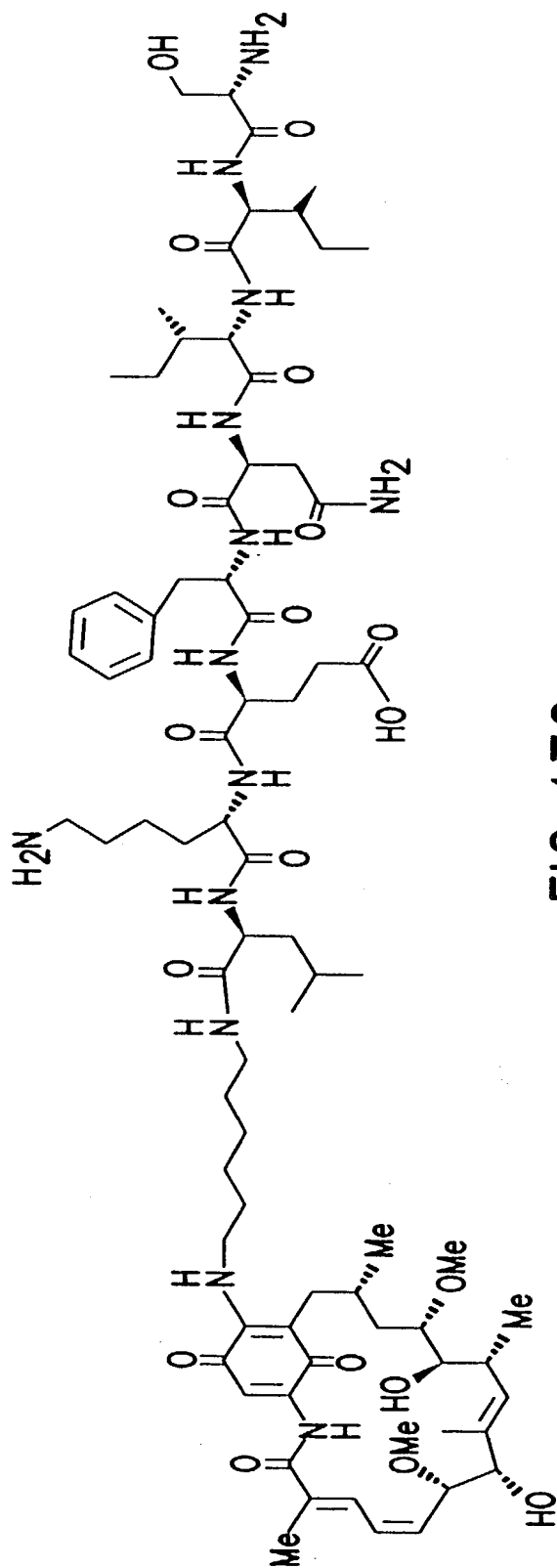


FIG. 17C

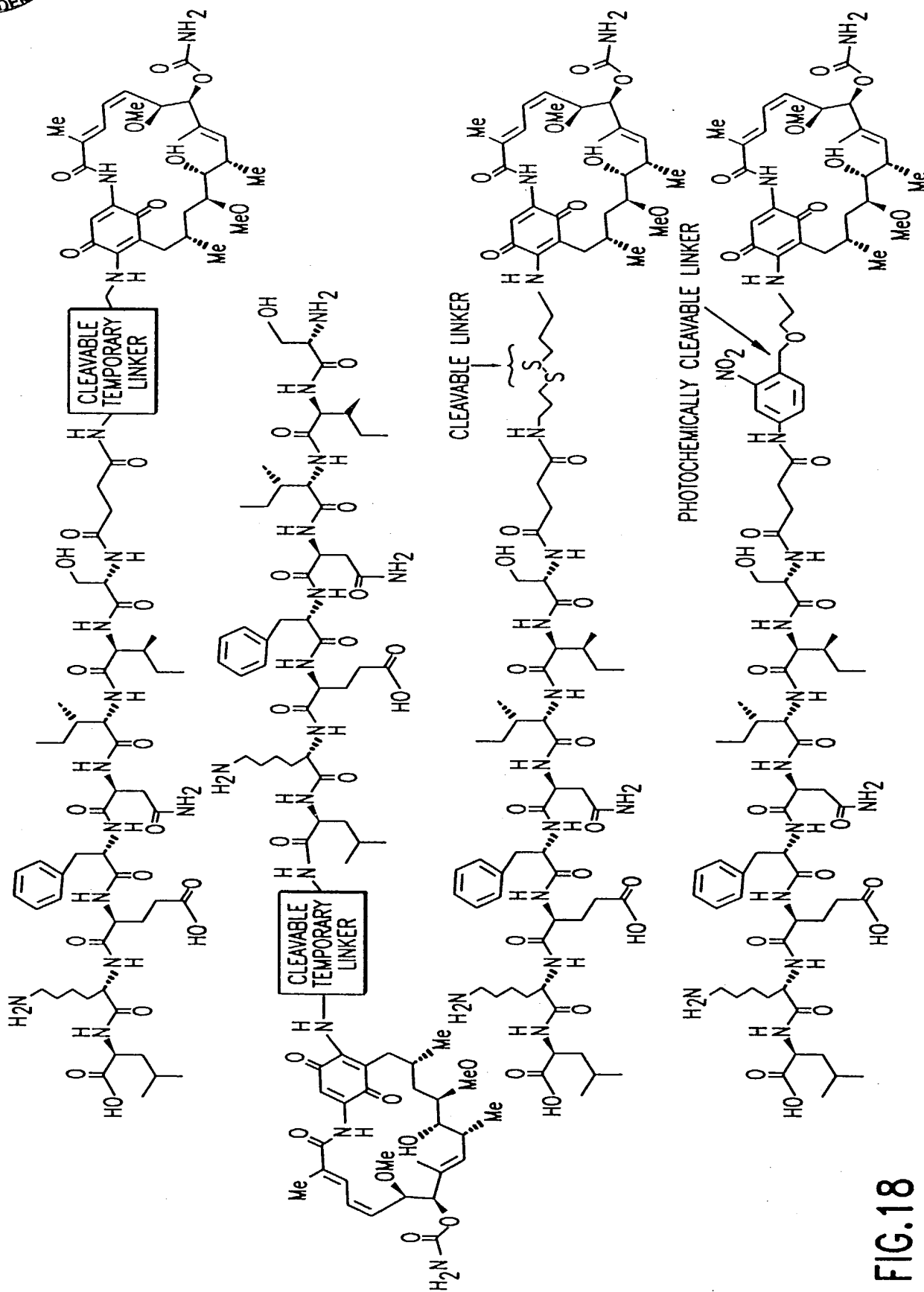


FIG.18





10053520 120902

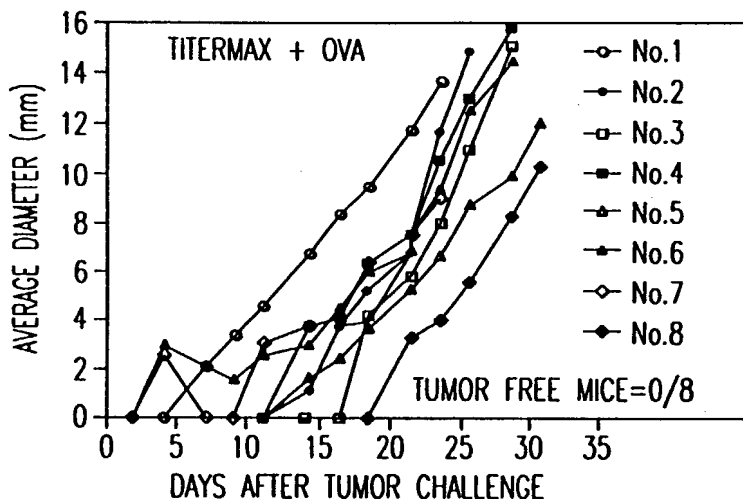


FIG.19A

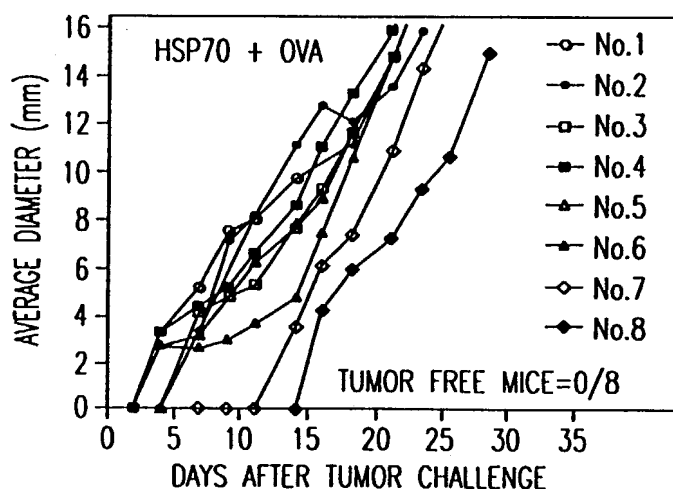


FIG.19B

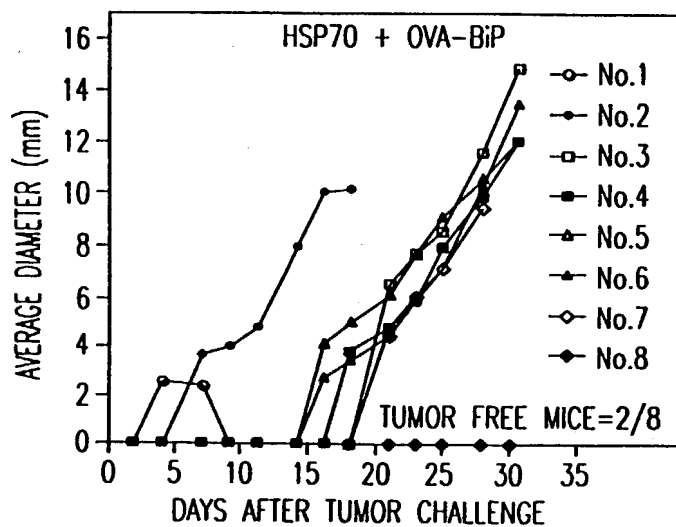


FIG.19C

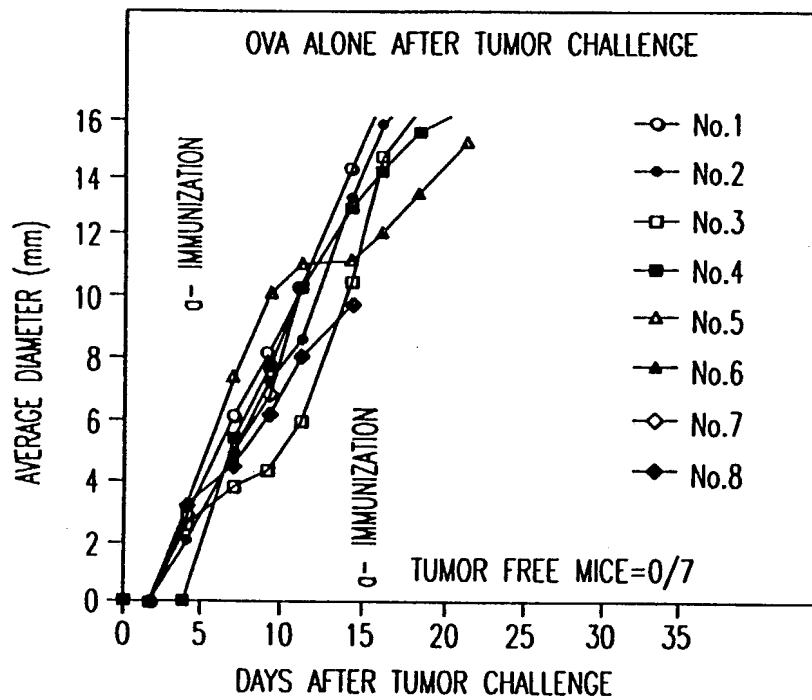


FIG.19D

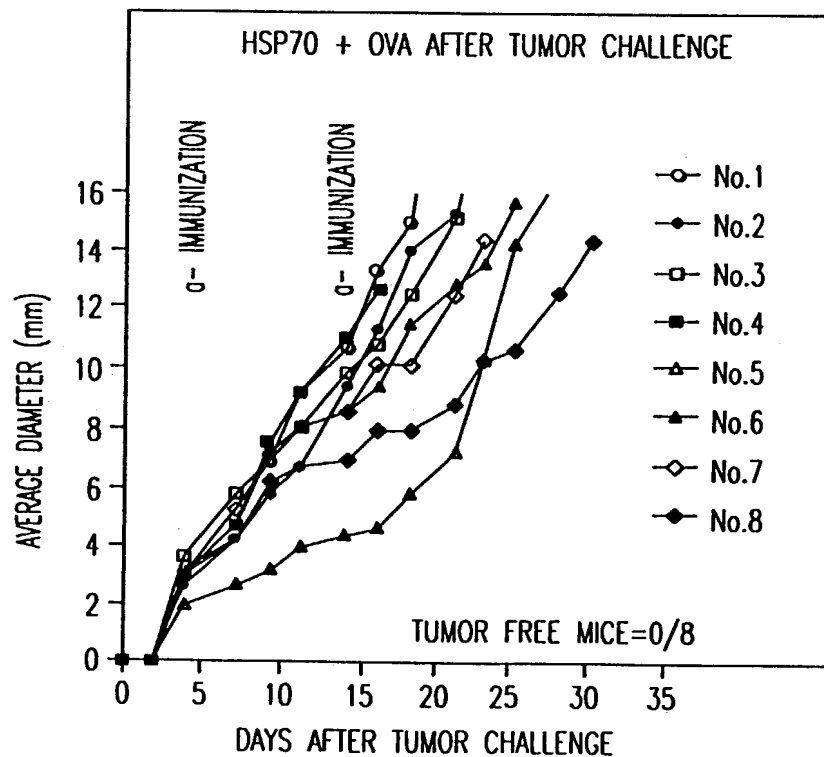
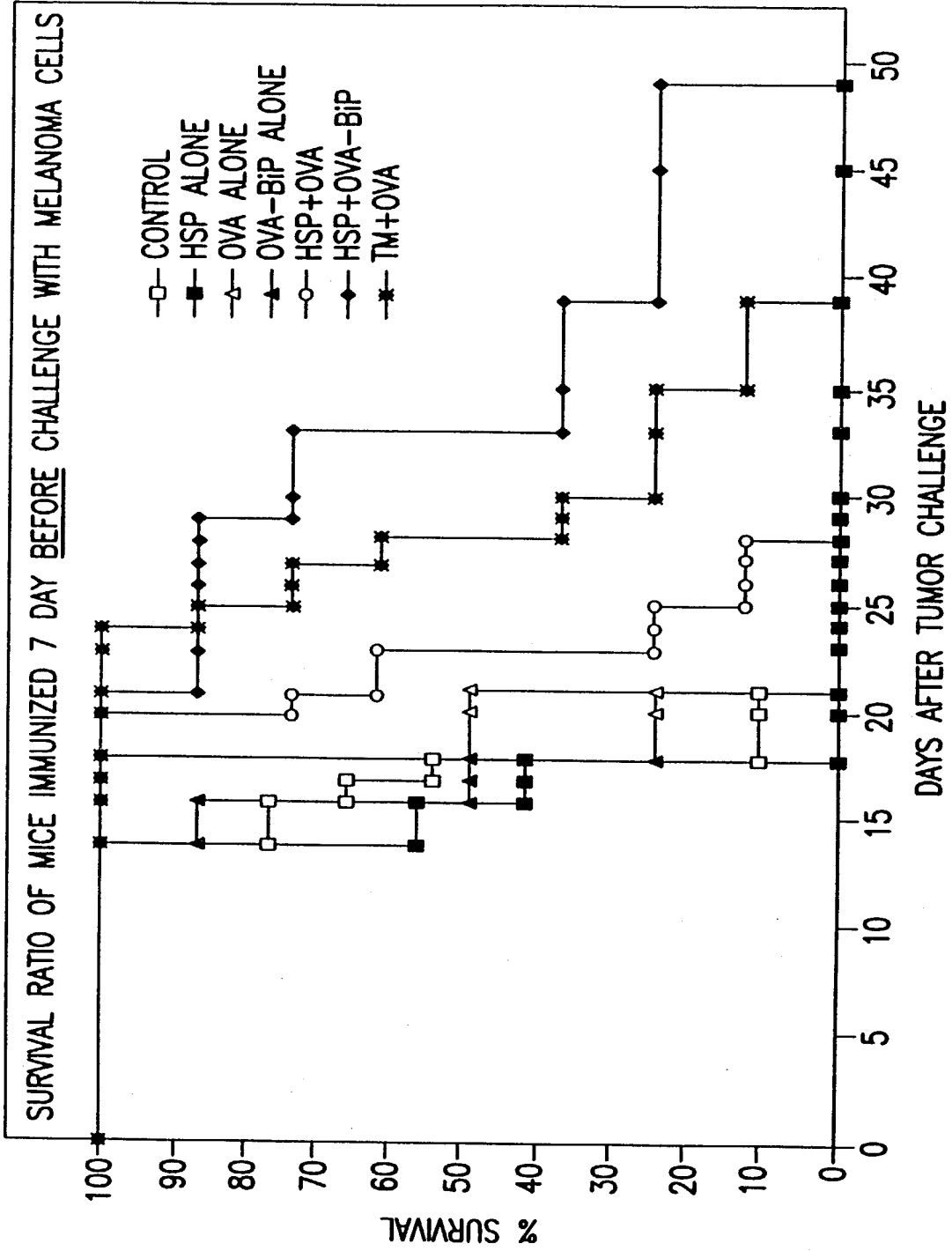
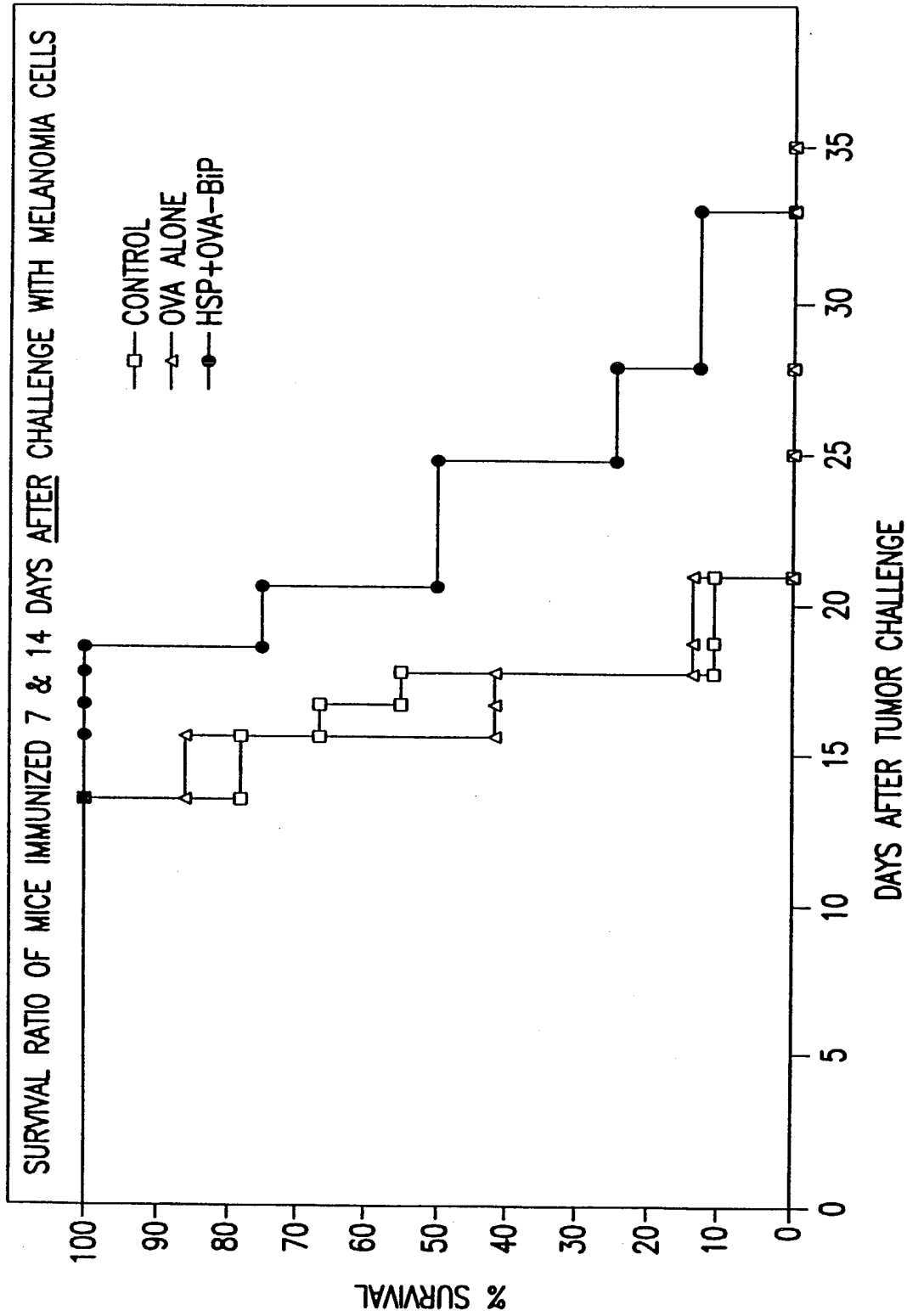


FIG.19E



**FIG.19F**



**FIG. 19G**